CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, March 24, 1910.

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'List of Contracts Pending, and the list of Plans and Specifications on file at the office of Engineering News, will be found on the last page of this Supplement.)

RAILWAYS.

ALEXANDRIA & WESTERN.—We are officially advised that date has not been decided upon for letting construction contracts. Preliminary surveys are made and right-of-way and capital are secured. About 30 miles of line will be built at first. The proposed line will run from Alexandria, La., west to the Sabine River, in Texas. G. F. Cotter is Pres. and F. W. Sylvester is Ch. Engr., both at Fort Worth, Tex. Noted on Oct. 28, 1909.

ALBANY & NORTHERN.—See Georgia Southwestern & Gulf Ry.

AMERICAN CENTRAL.—The Central Construction Co., Mobeetie, Tex., has been organized to build the American Central R. R. As previously noted, this railroad, if built, will extend from Winnipeg, Canada, to Aransas Pass, Tex. The first link is from Miami, Okla., to Vernon, Tex., 150 miles. Survey has begun at Miami. G. W. Angle is Ch. Engr., Vernon, Tex. The officers of the construction company are: E. P. Reid, Pres. and Mgr.; R. B. Rogers, Vice-Pres.; T. E. Durham, Treas.; M. F. Johnson, Secy.

AUGUSTA, LINCOLNTON & NORTHERN.—T. H. Verdel, Elberton, Ga., is Engr. for this proposed railway. Company has not been organized. As noted last week this company will apply for a charter in Georgia to build from Augusta, Ga., northwest via Lincolnton and Tignall to Danielsville, in Madison County, about 80 miles. The incorporators are S. L. Wilkes and J. C. Groves, of Lincolnton; John J. Wilkinson, C. D. Bolton and Thos. W. Hill, of Wilkes County; Thomas H. Verdel, W. A. Swift, T. M. Swift, Jr., and Z. C. Hayes, of Elberton County; and E. N. Cobb, of Athens, Clarke County.

BALTIMORE & OHIO.—See item under Buildings—Chicago, Ohio.

CHICAGO, MEMPHIS & GULF.—E. Rice, Vice-Pres., Dyersburg, Tenn., advises us that this company is now building a 10-mile extension north from Tiptonville, Tenn. Whether this line will be extended to Hickman, Ky., in the near future will not be decided until surveys are completed. Noted on Nov. 25, 1909.

CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS.—Contract for the construction of the Evansville, Mount Carmel & Northern extension from Mount Carmel, Ill., south to Evansville, Ind., 43 miles, is stated to have been awarded to the WABASH CONSTRUCTION CO., Des Moines, Iowa.

DYERSBURG NORTHERN.—See Chicago, Memphis & Gulf R. R.

GEORGIA.—It is planned to organize a company soon to build a steam railroad from Toccoa to Carnesville, Ga., 20 miles, via Mize and Red Hill. The necessary money is subscribed and surveys have been made. Contract will be let soon. Contractors and others can address W. S. Erwin at Clarksville, Ga. J. H. Hicks and Emory Hunnicut, also of Clarksville, are interested.

GEORGIA SOUTHWESTERN & GULF.—The Albany & Northern Ry., which has been transferred to the Georgia Southwestern & Gulf Railway Co., will be extended immediately about 155 miles, to St. Andrews, Fla., on the Gulf of Mexico. W. M. Legg is Pres. and Gen. Mgr., at Albany, Ga.; T. J. Shingler is Vice-Pres., and H. J. Bruton, Secy. and Treas. Noted on Feb. 24.

GULF COAST & PROVIDENT CITY.—We are officially informed that contracts will be let soon for building this railway from Pierce, Tex., to Provident City and Hallettsville, 60 miles. Surveys are made and right-of-way obtained. Emil Reinbold is Pres., Kansas City; Carey Shaw is Vice-Pres., Houston, Tex; Schlafli & Porter are Engrs., Houston. Fully noted on Jan. 27.

JACKSON R. R.—This company has been chartered in North Carolina, with headquarters at Webster, N. C., to build a railroad from Sylva to Tuckaseigee, 18 miles. Capital, $200,000. C. J. Harris, T. A. Cox, C. C. Cowan and others are interested.

JACKSONVILLE & ATLANTA SHORT LINE.—Company has organized with the following officers: B. B. Gray, of Pinebloom, Ga., Pres.; T. B. Ragan, Hawkinsville, Ga., and M. W. Garbutt, Fitzgerald, Ga., Vice-Presidents; C. A. Holtzendorff, Fitzgerald, Ga., Treas.; W. A. Heller, Fitzgerald, Ga., is Secy. Others interested are J. S. King, Rochelle, Ga.; H. E. Coates, Hawkinsville, Ga.; R. G. Dickerson, Homerville, Ga.; L. C. Holtzendorff, Valdosta, Ga.; and J. W. Strange, Ocilla, Ga. D. B. Jay, of Fitzgerald, Ga., is General Counsel. The proposed line is to be 210 miles long, running from Jacksonville, Fla., to Fort Valley, Ga., via Homerville, Willacoochee, Ocilla, Fitzgerald, Hawkinsville and Perry.

LAKE SHORE & MICHIGAN SOUTHERN.—Regarding the statement in the issue of Feb. 24, that "surveys have been completed, it is stated, for a line running from Ashtabula, Ohio, to Carson and Youngstown, Ohio," Samuel Rockwell, Ch. Engr., Cleveland, Ohio, advises us that "this is very premature, as estimates, etc., have not even been submitted to our management and as yet we do not know that such work will ever be done."

LYNCHBURG, AMHERST & NORTHERN.—Preliminary surveys will begin soon on this railway, which will be built from a point near Lynchburg, Va., via Amherst to Sandidges or Lowesville, Va., including three steel bridges of about 100 ft. average length. It will be about 30 miles in length. The incorporators include H. L. Page, Pres.; J. T. Bonney, Secy.; H. C. Joyner, J. E. Bowman, C. A. Jubert, Flickley Tucker, W. Ward Hill, C. L. Scott and C. J. Campbell, all of Amherst; Wallace A. Taylor, of Lynchburg, and W. E. Walker, of Sweetbrier, Va.

MEMPHIS, PENSACOLA & NORTHWESTERN.—Charter has been approved in Mississippi. The railroad will have terminal points at Memphis, Tenn. and Pensacola, Fla. The line is to extend from near Plum Point, De Soto County, on the boundary line between Mississippi and Tennessee, through and across Mississippi in a southeasterly direction, through Meridian to a point on the boundary line between Mississippi and Alabama, leaving the state at or near Pine Ridge, Clarke County, and running in the general direction of Pensacola, Fla. The incorporators are: J. M. Dockery, George E. Newhardt, H. T. Bruce, Dr. B. G. Henning, A. Goodman, S. W. Jones, J. H. Scaife, and D. S. Rice, of Memphis, Tenn.; Will Dockery, of Dockery, Miss.; R. Craig, of Chicago, and M. J. Roach, of Memphis. In their letter to the governor the organizers state that they have concluded all financial arrangements necessary with a European company, and that when the charter is approved work of construction will begin.

NATIONAL RY. OF MEXICO.—A force of engineers, under the direction of W. Gray, in the employ of the National Railways, is now engaged in making preparations for the opening of work on the Magdalena and Tiacolula extensions of the Oaxaca y Oriente Railway, now under lease to the Interoceanic Ry., it is stated. The engineers have instructions to survey the lines as far as San Dionisio, about 20 miles southwest of Tiacolula. These instructions give the first information that the line is to continue beyond Tiacolula. James M. Reid is Ch. Engr., Mexico City.

NEVADA-CALIFORNIA-OREGON. — Bids are to be asked soon to build an extension from Alturas, Cal., north to Lake View, Ore. As noted on Jan. 6, "contract for grading the extension from Alturas, Cal., to Lakeview, Ore., 50 miles, has been awarded to NUGENT & RICHARDSON, Lakeview, Ore.

RED RIVER VALLEY RY.—This company, with headquarters at Altus, has been chartered in Oklahoma to build a line 120 miles long from a point near Chillicothe, Tex., to Ardmore, Okla., including about eight steel bridges. Bids for construction and equipment will be opened soon. The incorporators are F. L. Mercer, Pres. and Gen. Mgr., Davidson, Okla.; Jos. De Baun, Vice-Pres.; T. B. Trueblood, Treas.; W. E. Blazier, Secy., and L. M. Delameter. George Kefauver is Ch. Engr.

ROME & NORTHERN.—An extension will be built from Gore to Tunnel Hill, 33 miles. Survey is being made. Construction is easy. The 18 miles from Rome to Gore, Ga., are nearly completed. H. H. Shackelton is Gen. Mgr.; H. M. Smith, Ch. Engr and Asst. Gen. Mgr., Rome, Ga.

SOUTHERN PACIFIC.—See item under Buildings—San Jose, Cal.

WESTERN MARYLAND.—A special meeting of the stockholders will be held on March 31 to act upon a resolution of the directors for issuance and sale of 25,469.670 of the authorized and unissued common stock, the proceeds of which will be used for building the 85 miles of railroad from the present terminus at Cumberland, Md., to a connection at Connellsville, Pa., with the Pittsburg & Lake Erie R. R. Co., with which the Western Maryland Ry. Co. recently entered into a traffic agreement. About $12,700,000 will be required to meet the cost of the proposed new construction. H. R. Pratt is Ch. Engr., Baltimore, Md. Noted on Dec. 16, 1909.

ELECTRIC RAILWAYS.

NEW YORK, N. Y.—The early construction of the New York, Westchester & Boston Ry. is assured as the company has been granted the right to proceed through property in litigation pending the final awards for right-of-way. However, it is stipulated in the order that the company must put up $35,000 in one instance and $25,000 in another in New Rochelle, where condemnation proceedings are now under way to cover the final awards, as well as any damages that may result from construction work. Although both sums are in excess of the real value of the property, the company has deposited the money with the New Rochelle Trust Co., in order that it may proceed. It is said that similar deposits will be made in White Plains and other towns along the line. Noted on Nov. 11, '09.

NEW CASTLE, PA.—The stockholders of the Mahoning & Shenango Railway & Light Co. on May 16 will vote on a stock increase from $10,000,000 to $11,000,000, the added million to be preferred stock. At the present time half of the company's $10,000,000 stock is preferred and the other half common. The company contemplates making extensive improvements on its various lines, it is stated. M. E. McCoskey is Gen. Mgr., Youngstown, Ohio.

An extension of six months' time was granted to the New Wilmington & New Castle Street Ry. Co. in which to commence operations on the construction of its line in this city by Councils at a recent meeting. This project was noted on March 10.

ORANGEBURG, S. C.—The Orangeburg Railway Co., capital, $50,000, is being promoted by W. C. Wolfe and J. A. Berry, of Orangeburg, and Lawrence Manning, of Camden, S. C. Company plans to build an electric railroad 30 miles long from Orangeburg to Springfield, S. C. It is also contemplated to extend to Columbia, Charleston and Augusta. The Edisto Power Co. was also incorporated by the same parties.

GRIFFIN, GA.—The Griffin City & Suburban Ry. Co. will apply for a charter in Georgia to build an electric railway in Griffin, Atlanta, Mason, Jackson, Barnesville, McDonough, Fayetteville, Williamson and Zebulon. The line in Griffin will be five miles long. Capital stock, $25,000. Incorporators: H. H. Bass, J. P. Nichols, B. R. Blakely, Frank Flynt, Joseph D. Bayd, Thomas J. Brooks, J. C. Brooks, R. F. Strickland, A. D. Akin and J. M. Preston.

LANSING, MICH.—The State Railroad Commission has authorized the Lansing & Northeastern Construction Co. to issue $800,000 of bonds with which to build the electric line from Lansing to Owosso. Detail of the plan for constructing the road has been completed, and it is announced that the builders expect to have the line in operation by next October. The company has already expended more than $100,000 in work on the line and has the grading well under way. Arrangements have been effected for financing the proposition, it is stated, and construction will start soon. As noted on Feb. 24, this company was incorporated in Michigan, with $500,000 capital, to build electric lines in eastern Michigan. The first line to be built will be from Lansing northeast to Owosso, about 30 miles. This section probably will be finished by Oct. 1. The route from Lansing parallels the Grand Trunk Ry. to Morrice, then runs north to Owosso. An extension is projected from Morrice east through Durand, thence northeast to Flint. An extension is also projected from Owosso, northeast to Saginaw. The incorporators include: G. G. Moore, K. Lathrop and S. W. Ladd, of Detroit, and T. W. Atwood, of Caro, Mich.

PEORIA, ILL.—The Peoria Northern Ry. Co. and the Peoria Southern Ry. Co. have been chartered in Illinois. The Peoria Northern Co. will build an electric railway from Peoria along the Illinois River through Chillicothe, Sparland, Lacon and Henry to Bureau. Incorporators: H. E. Chubbuck, H. J. Vance, H. C. Dillon and W. J. Achelpohl, of Peoria, and W. H. Carnahan, of Champaign. The Peoria Southern Ry. Co. will build an electric railway from Peoria to Pekin. Incorporators: H. E. Chubbuck, H. J. Vance, H. C. Dillon and W. J. Achelpohl, of Peoria, and W. H. Carnahan, of Champaign, Ill.

STOUGHTON, WIS.—The Common Council has granted an extension of six months in the franchise of the Cincinnati Construction Co. The old grant would have expired on March 17. The company expects to build from Madison to Janesville this season, beginning about May 1.

FREMONT, NEB.—The City Council has granted a franchise to the Nebraska Transportation Co., of Omaha, to build an electric railway in Fremont. The proposed railway is to connect Fremont and Omaha. The franchise calls for the completion of the line in 1912. C. W. Baker is Pres., Omaha. Noted on Feb. 24.

OMAHA, NEB.—The OSCEOLA CONSTRUCTION CO., of Lincoln, Neb., has been organized for the purpose of building the Omaha, Western & Lincoln R. R., which will extend from Omaha to Hastings, with a branch to Lincoln. The total length of the system will be 219 miles. Headquarters, 140 South 13th St., Lincoln. Frank E. Schaaf is Pres. and Mgr.; Charles Butler, Vice-Pres.; A. J. Schaaf, Secy.; A. P. Tilley, Treas; W. H. Fuller is Ch. Engr.

ABERDEEN, S. DAK.—The Aberdeen St. Ry. Co. will let contracts soon for the construction of four miles of track. Charles N. Herreid, Aberdeen, is Gen. Mgr.

KANSAS CITY, MO.—Announcement is made at the headquarters of the Kansas City-St. Louis Electric R. R. Co., according to press reports, that arrangements have been made in London for the disposal of $15,000,000 in 30-year 5% mortgage bonds of this company, and construction work will be begun this spring as soon as the second survey is completed. This survey, according to D. C. Nevins, Pres. of the company, will be completed within 60 days. The new electric line will be the longest in the West and it will afford the shortest route between Kansas City and St. Louis, 250 miles. The company is capitalized at $15,000,000. The work probably will be started in Howard County, where the company has 10,000 acres of coal land and cars will be running there in the fall.

EL PASO, TEX.—The El Paso, Fort Hancock Interurban Ry. Co. has presented a petition to the Board of County Commissioners asking that an extension of one year's time be given it in which to start construction of its proposed electric railway, which is to run from El Paso down the valley of the Rio Grande to Fort Hancock, a distance of about 60 miles.

WILBURTON, OKLA.—The Citizens' Street Railway Co., of Wilburton, has been chartered to build an interurban line from Wilburton to Paterson and Lutie, ten miles. Capital stock, $1,000,000. The incorporators are James M. Connell, Richard Howard, Benjamin Mills, Ellias M. Cooper and William Powers, all of Wilburton.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

HARTFORD, CONN.—See item under Streets and Roads.

MANCHESTER, CONN.—The Glastonbury Light & Power Co. is preparing to improve the lighting service in Manchester during the summer, which will include the erection of a new power house in Glastonbury, located near Folly Brook, and a substation here and the erection of new transmission lines. It is expected to have the work completed about Aug. 1, 1910.

NEW YORK, N. Y.—The Department of Bridges on March 3 awarded contract for furnishing and delivering one portable motor-driven, air-compressor outfit to the Williamsburg Bridge to the NATIONAL BRAKE & ELECTRIC CO., 111 Broadway, at $2,150.

ALBION, N. Y.—The A. L. Swett Electric Light & Power Co. wil build a new power plant of 1,000-HP. capacity with fireproof power house which will contain switchboards and apparatus for service lines to Brockport, Waterport and Carlton, as well as for the town of Albion.

GLENS FALLS, N. Y.—The Mills Power Co., of Glens Falls, has been incorporated with a capital of $50,000 by James H. Cross, of Johnstown; Theodore D. Cross, of Sandy Hill, and J. Ward Russell, of Glens Falls.

OTISVILLE, N. Y.—Bids are asked by the Board of Health, New York, until 10 a. m., April 12, for furnishing all the labor and materials necessary or required to install an electric light and power plant, including engine, dynamo, generator, transformer, electric wiring and all other work incidental thereto, on the grounds of the Tuberculosis Sanatorium, at Otisville, Orange County. Ernest J. Lederle, Ph. D., is Pres.

TRENTON, N. J.—The Trenton Power Co. has been incorporated at the office of Malcolmn Buchanan, Atty., of Trenton, with a capital of $360,000, to operate water, gas and electric power. David Pepper, Jr., of Philadelphia, Pa., is one of the incorporators.

GARWOOD, N. J.—We are officially advised that the TURNER CONSTRUCTION CO., 11 Broadway, New York, has been awarded the general contract for the construction of a reinforced-concrete power house and coal bunkers, 90 ft. × 60 ft., for the Aeolian Co. at their Garwood plant. Balch & Moatz are Archs. Work will be started at once.

ERIE, PA.—We are officially advised that bids were received as follows on March 21 by the Board of Education for heating and ventilating systems in No. 7 building: American Warming & Ventilating Co., Sixth and Wood Sts., Pittsburg, Pa., $16,195; James Purcell, Erie, $17,575; Gannon & Carey, Erie, $17,662; The Chafer Co., Cleveland, Ohio, $18,351; J. W. Danforth & Co., Buffalo, N. Y., $18,550; Anderson-Darragh Co., Pittsburg, $18,692; J. J. Walker Co., Pittsburg, $18,694; York Engineering Co., York, Pa., $18,754; McKay Heating & Plumbing Co., Erie, $18,986; W. B. Van Sickle Co., Cleveland, $18,994; Edward Joy Co., Syracuse, $19,552; Crook-Kries Co., Baltimore, $19,999; E. P. Bates, Syracuse, $20,710.

MONUMENT, PA.—The Harbison-Walker Refractories Co. has awarded contract, it is reported, for installing a complete electric lighting and power plant in its brick factory here to the CLEARFIELD ELECTRIC SUPPLY CO., of Clearfield, Pa.

WILMINGTON, DEL.—The Trustees of the State Hospital for the Insane at Farnhurst have awarded a 5-year contract for supplying the institution with electricity to the WILMINGTON CITY ELECTRIC CO. at $2,500 per year.

DELAWARE CITY, DEL.—Instead of obtaining electric current from the Delaware Water Improvement Co., which has its plant at New Castle, and conveying the current by wire to Delaware City, the American Power & Lighting Co. has begun the erection of a power plant on the south side of the Chesapeake & Delaware Canal, opposite Delaware City. Estimated cost, $35,000.

WINCHESTER, VA.—The Winchester & Washington Ry. Co. has awarded contract for the construction of its steam power plant here to HENRY S. RIPPEL, 7 Clay St., Baltimore, Md. P. O. Keilholtz, Continental Bldg., Baltimore, Md., is engineer.

HIGHLAND PARK (Richmond post-office), VA.—The Highland Park Citizens' Association has adopted the resolution requesting the Town Council to enter into a contract with a private corporation to furnish electricity to light the town. The town for some time has been considering the question of installing a municipal plant, but this plan has been dropped for the present.

RICHMOND, VA.—The bid of the McCay Engineering Co., 8 East Lexington St., Baltimore, Md., on March 14 was recommended for award of contract for the construction of a conduit system, at $10,700; the bid of the Safety Insulated Wire Co. for cables to be laid in the ducts was also recommended for award at $7,230.

SMYRNA, GA.—The Atlanta Northern Ry. Co. is considering plans for the construction of two substations, one to be located near the river and the other probably here. P. S. Arkwright, of Atlanta, Ga., is Pres.

EDISON, GA.—J. B. McCrary & Co., of Atlanta, Ga., have been engaged to prepare plans and take charge of construction of the proposed municipal electric light plant. Bonds for $8,000 have been voted. C. J. Jennings is Mayor.

COLUMBUS, GA.—The Stone & Webster Corporation, 147 Milk St., Boston, Mass., which owns and operates the Columbus Power Co., has secured permission from the County Commissioners of Muscogee County to erect transmission lines along the Chattahoochee River in this county to the Harris County line, where another large dam, it is reported, will be constructed across the river soon.

LAKELAND, FLA.—Bonds for $65,000 have been sold by the city, $18,000 of which will be used for improvements to the municipal electric light and water plants.

MILTON, FLA.—The Solomon-Norcross Co., 1622 Candler Bldg., Atlanta, Ga., has been engaged to prepare plans for the construction of electric light plant, water-works and sewer systems. Bonds for $40,000 have been voted.

NEW CONCORD, OHIO.—Samuel S. Wyer, Engr., of Columbus, Ohio, is preparing preliminary plans for the construction of a municipal electric plant here. The Village Council has not yet definitely decided to build the plant although it is understood that two parties are in the field with propositions to build and operate a lighting system, and if the Village Council can secure a street lighting service at a reasonable price, private ownership of the plant is favored.

FORT WAYNE, IND.—The Board of Public Works has awarded contract for a turbo-generator set for the municipal electric plant to the FORT WAYNE ELECTRIC WORKS, at $35,139.

The City Engineer and City Electrician have been instructed by the Board of Public Works to prepare plans and estimates for the installation of a 6-duct conduit in Calhoun St. to provide for the municipal electric light, police and fire-alarm wires.

GREENFIELD, IND.—The County Commissioners have awarded contract for the installation of a lighting plant for the county infirmary to the CLARK LIGHTING CO.

GREENFIELD, IND.—See item under Sewerage.

LOGANSPORT, IND.—Joseph Stewart, D. D. Fiekle and others are planning to improve the Taber dam in the Wabash River, and build and equip a hydro-electric plant.

HARTFORD CITY, IND.—The City Council has voted to extend the franchise of the HARTFORD CITY LIGHTING CO. for a term of 25 years, and the street lighting contract for ten years, in return for which the company agrees to reduce the rates of electricity for lamps and motors, and install additional street lamps, and also to build a new plant and install new machinery to cost about $25,000.

INDIANAPOLIS, IND.—The Board of Public Works on March 18 awarded contracts for furnishing current for the new city hall, asphalt plant, and street cleaning barn buildings. For the new city hall building the MERCHANTS' HEAT & LIGHT CO. received the contract for current for lighting, vacuum cleaning system, elevators and a fan motor at 2.41 cts. a KW.-hr., the Indianapolis Light & Heat Co. bidding 3 cts. The INDIANAPOLIS LIGHT & HEAT CO. secured contracts for the asphalt plant at 7½ cts. and for the street cleaning barn at 4 cts.

SEYMOUR, IND.—We are officially advised that the new improvements and extensions for the Seymour Gas & Electric Light Co.'s new plant are well under way. A new boiler, Corliss engine, two 3-phase, 2,300-volt, 60-cycle generators are being installed. The entire pole line is to be rebuilt and two miles of gas mains are to be put in. The franchise asked for the new company by Frank R. Grover, W. C. Bevins, and E. J. Condon, who is doing the engineering and construction work, has already passed first reading.

CHICAGO, ILL.—The American Sintering Co. is contemplating purchasing equipment for its power plant, including a 300-HP. engine and a 200-KW. direct-current generator with auxiliary apparatus.

CAIRO, ILL.—The McKinley system is contemplating improvements to its new gas and electric light plant here, just completed. Estimated cost, $200,000. H. E. Chubbuck is Gen. Mgr.

ALLERTON, IOWA.—The citizens have voted to issue $12,000 of bonds, for the construction of an electric light plant.

STAFFORD, KAN.—On March 8, the citizens voted to issue $45,000 of bonds for the construction of an electric light plant and water-works system.

LEAVENWORTH, KAN.—The Helmers Mfg. Co. has awarded contract to the HARRISBURG FOUNDRY & MACHINE CO. for a 300-HP. engine direct-connected to generator for its new power plant. The work will be equipped for electric motor drive throughout.

LINCOLN, NEB.—We are officially advised that bids were received by Roscoe C. Ozman, City Clerk, on Feb. 24 for furnishing and erecting with concrete foundation at the Hutton lighting station one 750-HP. cross-compound, condensing or non-condensing engine, or one turbine of the same rating, to be direct connected to a 3-phase, 60-cycle, alternating-current generator with exciter belted to engine shaft. The contract has been let to ALLIS-CHALMERS CO., Milwaukee, Wis., at $16,386.

ABERDEEN, S. DAK.—The Aberdeen Street Ry. Co. will soon be ready to let contracts for equipment and the construction of a power plant here. Charles N. Herreid, Aberdeen, is Pres.

KANSAS CITY, MO.—The Metropolitan Street Ry. Co., Kansas City, expects soon to purchase one 2,000-KW. rotary converter and accessories. W. W. Wheatley, Kansas City, is Gen. Mgr.

LITTLE ROCK, ARK.—The City Council has adopted the resolution appropriating $5,000 for the construction of a new power-house for the municipal electric light plant and $50,000 for equipment.

PEARSALL, TEX.—The Pearsall Water, Ice & Light Co., lately incorporated, plans to construct an electric light plant and water-works system, including the erection of a building 100 × 40 ft., a steel tower and tank having a capacity of 60,000 gallons and the installation of a 75-KW. generator. C. F. Preslar is interested.

BROWNSVILLE, TEX.—The citizens here voted to issue $30,000 of bonds for improvements and extensions to the local electric light and power plant.

AUSTIN, TEX.—The City Council has entered into conditional contract with the DUMONT-HOLMES STEEL CONCRETE CO., represented by J. C. Dumont, for the construction of a new dam across the Colorado River here to replace the structure that was destroyed by a flood in that stream several years ago. Embraced in the contract is the installation of a complete hydro-electric plant. The city is to pay for the works in forty semi-annual installments of $25,000 each or a total of $1,000,000. The dam will be 65 ft. high and several hundred ft. long. It will be located near the site of the old one and will form a reservoir about 30 miles long by one-quarter to three miles wide. The proposition of the Dumont-Holmes Steel Concrete Co. received the endorsement of the local Business League before it was submitted to the City Council. In order to make the contract effective it must be approved by vote of a majority of the taxpayers. It will be submitted at a special election to be called as soon as the necessary arrangements for same can be made. The proposed dam will furnish power for operating the municipal water and light plant and water-works system. It is expected that the city will be in position to sell a large amount of excess power to manufacturing concerns.

WILBURTON, OKLA.—The McLoud Construction Co., of Kansas City, Mo., has been granted a franchise by the city to construct and operate electric light and gas plants here.

FOWLER, COLO.—The City Council has approved the ordinance granting a 20-year franchise to G. E. Miles, of Denver, Colo., and G. E. Williams, of Sheridan, Wyo., to construct and operate an electric light plant here.

LAFAYETTE, COLO.—The Northern Colorado Power Co. is preparing to extend its 40,000-volt transmission line from Lafayette to La Salle. The company will supply electricity in Erie and one or two other mining towns on the way. From La Salle the line will extend to Greeley, so as to make a complete loop, by which any town of the Northern Colorado district may be fed in either direction. La Salle and Kersey are being wired for electric lamps.

CENTRALIA, WASH.—The J. A. Veness Lumber Co. has been granted a franchise by the Board of County Commissioners, to erect and maintain electric transmission lines along the county roads for 25 years.

PORT ANGELES, WASH.—The Port Angeles Power & Electric Co. has applied to the City Council for a franchise to furnish electricity for lamps and motors here for 25 years. Under the terms of the franchise the company is to erect a hydro-electric power plant on Little River and to furnish 75 HP. for the municipal electric system in Port Angeles and additional power it may require not exceeding 1,000 HP., the company to have the right to use the poles of the city system and the city the use of the company's system, where the city now has none without cost to either party; the company to have the privilege of selling energy for industrial purposes in amounts of 10 HP. and up, the charge not to exceed $50 per HP. per year to consumers. The city may at any time purchase the plant of the company on the basis of $100 per HP., the same to be determined by the actual capacity of the plant at peak load at low water in Little River. The city is to pay the company $500 per month for 75 HP. and for additional power used at the rate of 3 cts. per KW.-hr. V. R. Bethel and Frank McKean, of Seattle, are interested.

CONDON, ORE.—The H. M. Byllesby Co., of Chicago, Ill., has purchased the plant and holdings of the Condon Electric Co., which operates light and power plants in Medford, Grants Pass and Oregon. Improvements will be made by the new owners to cost about $250,000.

LONG BEACH, CAL.—Negotiations have been closed, it is reported, whereby a site has been secured here for the proposed plant of the Edison Electric Co., of Los Angeles. The plant will be located at the mouth of the San Gabriel River, south of the ocean entrance to the Long Beach harbor. It will be steam-driven and the initial equipment will have an output of 30,000 HP. with provisions to increase it eventually to 100,000 HP. The plant will be the center of a distributing system which will practically include all the beach towns, Long Beach, Redondo, Naples, Venice, Ocean Park, Santa Monica, San Pedro and Wilmington. Work will commence at once on construction and will be completed within a year. Estimated cost of initial installation, about $2,000,000. R. H. Ballard is Secy.

RED BLUFFS, CAL.—Notice of application of 300,000 ins. of water of the Sacramento River, to be taken out at the mouth of Red Bank Creek, about three miles south of here, has been filed by Dr. J. M. West, director of the Tehama County Power & Transportation Co. The water is to be used in Tehama, Glenn, Colusa and Yolo counties, for irrigation, generating electricity, domestic and other purposes. The company was organized some time ago, and has filings on waters along Mill Creek for power purposes.

SANTA ANA, CAL.—The Southern California Edison Co. has applied to the Board of Supervisors for a franchise to erect transmission lines on the roads and highways in Orange County.

LOS ANGELES, CAL.—The BABCOCK & WILCOX CO., 85 Liberty St., New York, has secured contract for installing six Stirling water-tube boilers in the plant of the Los Angeles Gas & Electric Co., at Palmetto and Alameda Sts.

TORONTO, ONT.—C. H. Rust, City Engr., in a report to the Board of Control, recommends the acceptance of the bid of the Canadian-British Insulated, Ltd., of Montreal, for the cable for the electric power plant, at $48,024. The next lowest bid was $48,189.

LONDON, ONT.—JOHN McDIARMID & CO., of Montreal, have secured contract for the pumps in the new municipal pumping station, at $5,640. The LANCASTER MOTOR & SWITCHBOARD CO., of Lancaster, England, obtained the contract for motors and switchboard, at $11,032. The contract for the gas engine equipment has been awarded to the DANIELS CO., of Stroud, England, at $13,000, and contract for the substation building to BENJAMIN HOLE, at $9,000.

WINNIPEG, MAN.—The Civic Power Committee on March 4 decided to call for bids for the erection of a substation at McPhillips St. to cost about $50,000, and for the building of a conduit system from that station to Point Douglas station at a cost of $50,000.

The CANADIAN WESTINGHOUSE CO. has been awarded contract for the equipment of the municipal power distribution station at Winnipeg, at $113,000. CHAPMAN & WALKER for the interior lighting, heating and power system for the substation, at $8,225, and the CANADIAN FAIRBANKS CO. for supplying oil in the transformer station, at $6,482.

The following bids have been received for the municipal power substation building: Peter Lyall & Sons, $94,000; Thomas Kelley & Sons, $89,531; C. W. Sharp & Sons, $113,736; Carter, Halls, Aldinger, $90,973; Engineer of Construction, $88,351; S. Brynjolfsson, $87,833; John Gunn & Sons, $90,637; J. H. Tremblay & Son, $86,125; Glaydon Bros., $78,160; J. McDiarmid & Co., $82,006. The power engineers and consulting engineers at a meeting on Feb. 28, recommended the bid of J. McDiarmid & Co., though it was not the lowest, and although the Board of Control sent the recommendation on to the Council the latter body referred the same back for further consideration.

HERMOSILLO, MEX.—It is announced that the Mayo River Power & Land Co. has finished the surveys for the first of the series of three dams and hydro-electric plants that it will erect on the Mayo River in the eastern part of the state of Sonora and that it is expected that everything will be in readiness for the commencement of construction work by the close of the coming rainy season in September next.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

LAWRENCE, MASS.—ARTHUR MAHONEY was awarded contract on March 16 by the city for constructing the extension of the Bloody Brook culvert from Sheridan St. to the Spicket River. There is $10,000 available for this work.

CHARLESTON (Boston post-office), MASS.—The old Mystic Ave. bridge, which spans the Boston & Maine R. R., in Charleston, is being demolished and in its place there is to be built a larger structure. Estimated cost, $50,000.

MIDDLETOWN, CONN.—The New York, New Haven & Hartford R. R. Co., Edw. Gagel, Ch. Engr., New Haven, has authorized the construction of a bridge over the Connecticut River on the Air Line Division, between Portland and Middletown. Estimated cost, $360,000. Contracts will be awarded in the late spring.

JAMESTOWN, N. Y.—Clyde G. Jones, City Engr., is preparing plans for a steel viaduct to be built over the tracks of the Erie R. R. at Main St.

SYRACUSE, N. Y.—Plans, specifications and the estimated cost for a new concrete bridge at Dickerson street over Onondaga Creek have been completed by H. A. Allen, City Engr. Estimated cost, from $9,000 to $9,500.

RUTHERFORD, N. J.—Bids are asked by a committee of the Board of Chosen Freeholders at the office of the Clerk, Hackensack, until 1 p. m., April 1, for the construction of a new bridge over the Erie R. R. tracks at Montross Ave., Rutherford.

MEADVILLE, PA.—Plans are being prepared, it is reported, for a 2-span bridge to be constructed over French Creek at Mead Ave.

WEST CHESTER, PA.—Bids are asked until noon, March 28, by the County Commissioners for the construction of an iron girder bridge, with reinforced-concrete floor and sub-structure. E. Vinton Philips is Clk.

READING, PA.—Bids are asked until 10 a. m., April 15, by A. L. Rhoads, County Controller, for repairing Harts's Mill bridge, one-half mile south of Morgantown.

WAYNESBURG, PA.—Bids are asked until 1 p. m., April 5, by the County Commissioners for constructing several bridges. James McCracken is Clk.

LYNCHBURG, VA.—H. [illegible]haner, City Engr., will prepare plans a[illegible] specifications for the construction of a re[illegible]ed-concrete bridge across James River, [illegible]ecting this city with Amherst County.

WISE, VA.—The Wise Co[illegible] Supervisors will construct six steel or i[illegible] bridges, two in Gladeville District, two i[illegible]ps and one each in Richmond and Rob[illegible] Districts. The city will construct a s[illegible] bridge connecting the road from Norto[illegible]h the main part of town.

ELIZABETH CITY, N. C.—[illegible] plans and specifications for the new br[illegible] to be constructed by the Camden Fe[illegible] Co., across Pasquotank River, permissio[illegible] which has been granted by the U. S. [illegible]nment authorities, have been receive[illegible] accepted. Bids will be asked and work [illegible]ll probably begin within 30 or 60 days. [illegible] bridge is to be built of wood and ste[illegible]nd will be 600 ft. long and 10 ft. above t[illegible] water. The draw is to be of the rolling [illegible] type with 75 ft. in the clear.

NEWBERRY, S. C.—Newberr[illegible]ounty will construct a steel or iron bri[illegible] across the Saluda River. Dr. George Y. [illegible]nter is interested.

ATLANTA, GA.—The Souther[illegible] Ry., W. H. Wells, Ch. Engr. of Constructi[illegible] Washington, D. C., will spend $50,000 [illegible] strengthening bridges between Macon and [illegible]tlanta.

GREENWOOD, MISS.—W. T. [illegible]OUNG was awarded contract on March 8 [illegible] the Board of Supervisors of Leflore Cou[illegible] for furnishing steel bridge at Money [illegible]d at Shell Bluff. Both bridges are to cost a[illegible]ut $50,000.

GRETNA, LA.—Bids will be received until June 1 by E. M. Hubert, Secy. Police Jury, for constructing a steel bridge across Harvey Canal in Jefferson Parish.

HOUMA, LA.—The city has awarded contract to WILLIAM WATKINS, of Houma, for constructing a bridge across the Prairie drainage canal.

LISBON, OHIO.—Bids are asked by the County Commissioners until 1 p. m., March 28, for labor and materials for the constructing of bridge No. 1025. C. H. Cobourn is Audr.

TROY, OHIO.—The Commissioners of Miami County have decided to construct three lift bridges over the Miami and Erie Canal and three bridges over Miami River. Estimated cost, $75,000. H. E. Whitlock is County Surv.

COSHOCTON, OHIO.—Bids are asked until 1 p. m., March 25, by the Coshocton County Commissioners for erecting a 63-ft. span bridge in Oxford Township. W. J. Winters is County Audr.

DAYTON, OHIO.—Contract for drawing plans and specifications for the construction of the Stewart St. bridge across the Miami River has been given to the NEW YORK CONCRETE-STEEL ENGINEERING CO., Park Row Bldg., New York.

BRYAN, OHIO.—Bids will be received by R. H. Weaver, County Audr., until April 4 for constructing several reinforced-concrete substructures and superstructures for bridges.

VINCENNES, IND.—Bids are asked until 2 p. m., April 5, by the Knox County Commissioners for repairs to various bridges. John T. Scott is County Audr.

GOSHEN, IND.—Bids are asked by the Elkhart County Commissioners until 9.30 a. m., April 5, for constructing and repairing bridges in various townships. D. O. Batchelor is County Audr.

WARSAW, IND.—The Commissioners of Kosciusko County have ordered plans for the construction of 15 new bridges. Bids will be in order soon.

CANNELTON, IND.—The County Commissioners have awarded contract for constructing a steel bridge over Oil Creek to the VINCENNES BRIDGE CO., of Vincennes, at $7,084.

LANSING, MICH.—The following bids were opened on March 3 by the Council for constructing a traffic bridge at South St., (a) reinforced concrete, (b) steel: Albion Lumber Co. (a) $15,950; Western Concrete Bridge Co. (a) $19,175; Wynkoop-McGormley Co. (a) $20,487, (b) $19,900; Illinois Bridge Co. (a) $27,700; Groton Bridge Co. (b) $18,480. H. A. Collar is City Engr.

GRANDVILLE, MICH.—Bids will be received until March 25 by the Township Board of Wyoming Township, at Grandville, for constructing a reinforced-concrete bridge over Buck Creek, Wyoming Township. C. Huizenga is Highway Comr., Grandville.

*ST. JOSEPH, MICH.—We are officially advised that bids were received as follows on March 16 for constructing the substructure of a swing bridge at Wayne St.: G. A. Allmendinger, Benton Harbor, Mich., $18,295; Fitzsimmons & McConnell, Tacoma Bldg., Chicago, Ill., $23,659. W. J. Cleary is City Engr.

DUBUQUE, IOWA.—The Chicago, Milwaukee & St. Paul Ry. plans building a bridge across the Mississippi River 22 miles from Dubuque to the Milwaukee-Kansas City line, and will build large sorting [illegible]rds near Janesville, Wis. Estimated cost, $800,000.

FAIRBURY, NEB.—Bids will [illegible] received by R. E. Riley, City Clk., until March 28 for a concrete arch 81 ft. long, [illegible] be constructed at Seventh and G Sts.

GRAND ISLAND, NEB.—Bids [illegible]ill be received until March 28 by the Co[illegible]ty Board of Supervisors at Grand Islan[illegible] for constructing all steel bridges durin[illegible] the year. G. H. Poell is County Clk.

SIBLEY, MO.—The Atchison, [illegible]opeka & Santa Fe Ry., C. A. Morse, Ch. [illegible]ngr., Topeka, Kan., has been authorized [illegible] construct a bridge across the Missouri Riv[illegible]

FORT SMITH, ARK.—The F[illegible]e Bridge Commission has instructed its [illegible]gineer to complete specifications for th[illegible] proposed bridge. Waddell & Harrington [illegible]re Engrs., New Wilson Bldg., Kansas City, [illegible]o.

BELTON, TEX.—The Bell County Commissioners have awarded contract to the MISSOURI VALLEY BRIDGE & IRON CO., Dallas, Tex., for the construction of nine iron bridges across streams in Temple and Holland Districts. Cost, $6,000.

LAREDO, TEX.—The National Railways of Mexico, E. N. Brown, Pres., 25 Broad St., New York, has awarded contract to BANCARA Y OBRAS DE BIENES RICES, Mexico City, Mex., for constructing a bridge over the Rio Grande at this point, bridge to be of reinforced concrete and steel, six 175-ft. deck spans.

HOUSTON, TEX.—Plans for the bridge across the Houston ship channel at the foot of Main St. have been submitted to the War Department and approved and have also been approved by the Railroad Commission. It is expected they will be submitted to the City Council soon. The new bridge will cost approximately $225,000. It will be about 1,600 ft. in length with a driveway 43 ft. wide and room for two street car tracks. Two sidewalks six ft. wide are also included in the plans.

BRADY, TEX.—The Commissioners' Court has let contract for a bridge across the San Saba near the town of Voca to the MISSOURI BRIDGE CO., of St. Louis, at about $9,900.

A small bridge across Deep Creek will be built near the town of Mercury, this contract going to the WEATHERFORD BRIDGE CO. Work on both bridges will begin at once.

DALLAS, TEX.—The Municipal Commissioners have adopted the plans of J. M. Preston, City Engr., for a steel reinforced-concrete bridge to be constructed across Turtle Creek on Cedar Springs Ave., 60-ft. span. Estimated cost, $7,000.

HARLINGEN, TEX.—The Commissioners Court, Brownsville, on March 4, awarded contract for constructing a steel wagon bridge over the Arroyo Colorado to the OTTUMWA BRIDGE CO., of Houston, at $15,000.

TULSA, OKLA.—The city has voted $20,000 of bonds for constructing, extending and maintaining viaducts and bridges, etc. John O. Mitchell is Mayor.

MUSKOGEE, OKLA.—Bids will be received by the Board of County Commissioners, Muskogee, J. J. Brotherton, Chn., until March 28 for constructing a 160-ft. steel bridge over Dirdnie Creek, near Webbers Falls.

MEEKER, COLO.—Bids are asked until March 26 by C. W. Comstock, State Engr., Denver, for construction of steel bridge across White River.

*SNOHOMISH, WASH.—We are officially advised that bids were received as follows on March 14 by the Board of County Commissioners of Snohomish County for the construction of a steel swing span over the Snohomish River at Snohomish. The work consists of a 280-ft. steel span, 20-ft. roadway, and two 6-ft. sidewalks, on concrete center pier and concrete abutments: (a) Plan A, (b) Plan B: John F. Birney is County Engr., Everett, Wash.: Everett Construction Co., Everett, Wash., (a) $63,357, (b) $67,687; Minneapolis Steel & Machinery Co., Minneapolis, Minn., (a) $55,729, (b) $59,217; International Contract Co., Seattle, Wash., (a) $56,984, (b) $58,861; Pearson Construction Co., Inc., Seattle, (a) $61,951, (b) $69,397; Cowlitz Bridge Co., (a) $63,561, (b) $66,783; Lance & Peters, Inc., Seattle, (a) $79,220, (b) $86,538; American Pile Driving Co., Everett, (a) $47,803, (b) $51,924; Puget Sound Bridge & Dredging Co., Seattle, (a) $64,925, (b) $71,727. The bid of the American Pile Driving Co. for Plan B, at $51,924, was accepted, but award of contract was put off for two weeks.

COMAS, WASH.—Bids were opened on March 1 by the County Commissioners, Vancouver, for constructing a 200-ft. steel bridge over Washougal River, between Camas and Washougal. The bid of the Columbia Bridge Co., of Portland, Ore., has been recommended for acceptance, to be acted on at the April meeting at the following prices. For a 200-ft. steel superstructure, $5,250 and $4.600; 870 cu. yds. concrete piers and abutments above $10, or below $12; steel cylinder piers, $2,400, and 1,122-ft. pole trestle, $5.25. Fred J. Bailey is County Engr., Vancouver.

KALAMA, WASH.—The HURLEY-MASON CO., of Tacoma, has been awarded Contract for the concrete work in the bridges and culverts along the line of the double track between Tenino and Kalama, on the Northern Pacific Ry. W. L. Darling is Ch. Engr. Work is to be started immediately and to be finished in November. Aggregate of contract, about $300,000.

PASADENA, CAL.—Preliminary plans and estimates have been prepared for the construction of a bridge over the Arroyo Seco. W. F. Knight is Chn. Bridge Com.

PIEDMONT, CAL.—The citizens have voted to issue $35,000 of bonds for constructing a concrete viaduct on Oakland Ave.

LOS ANGELES, CAL.—The County Highway Commission has submitted to the Board of Supervisors plans and specifications for 51 bridges and culverts on the Bassett-Pomona road. A reinforced-concrete bridge 240 ft. long is planned for Sycamore Canyon near Eagle Rock. Two bridges are included in the improvement of the Whittier Road from Los Angeles to East Whittier.

GUELPH, ONT.—Bids are asked until noon, March 26, by James Hutcheon, Engr., for the construction of a concrete arch bridge of three spans of 33 ft. each over Speed River, three miles north of here.

BRANTFORD, ONT.—Bids are asked by J. A. Smith, Township Clk., until noon, April 2, for concrete bridges, arches and abutments, and until 10 a. m., April 4, for an 80-ft. span steel bridge over Fairchild's Creek, Township of Brantford.

MINITONAS, MAN.—Bids will be received until March 30, at Minitonas, for a 90-ft. steel Pratt truss bridge. Piles, caps and shore spans will be built by the municipality. The bridge is to be built on the Woody River, about three-quarters of a mile south of the Bowsman station, C. N. R. Plans may be seen at the Department of Public Works, Winnipeg, or at office of E. Widmeyer, Secy.-Treas., Minitonas.

BUILDINGS.

BOSTON, MASS.—A 2-story building, to be used for banking purposes, is to be built at 70 Devonshire St. Plans have been made by Shepley, Rutan & Coolidge, Archs., Ames Bldg. It is the intention, within a few weeks, to begin razing the buildings now on the site. The bank has been designed for the use of a single banking firm. The finish will be complete and in keeping with the general scheme adopted by many of the trust companies. There will be four large pillars in the front, with the main entrance in the middle, on each side of which will be large plate-glass windows. Directly above there will be three small balconies, with windows, while the upper portion will have an artistic cornice arrangement. The construction will be light stone and terra cotta, and there will be a central dome, which will afford both light and air. There will be a directors' room and four or five offices in addition to a general banking room on the ground floor, and a basement for a delivery room. In the gallery on the second floor there will also be a room for a number of clerks. The building will also have a large private vault.

CAMBRIDGE, MASS.—The Trustees of the Andover Theological Seminary, at their last semiannual meeting, adopted the plans of Allen & Collens, Archs., 1170 Broadway, New York, for the seminary buildings, which are to be erected on the Norton estate, between Francis St. and Divinity Pl., Cambridge. The site connects directly with that of the Harvard Divinity School, and it is intended that the two schools shall work in conjunction. The library of the divinity school will probably be transferred to the new library of the theological seminary. The library will occupy the two southerly features of the group. The south wing will contain the stack and service-rooms, while the low connecting building adjoining the administration building with the stack-room will be devoted to the theological reference library. The library is primarily designed for 200,000 volumes, but the stack wing is so placed that it can be extended indefinitely in the direction of the Harvard Divinity School to accommodate additional volumes. The reference hall, occupying the low 1-story building, will have a trussed timber roof in old English style. The administration building, which occupies the center of the future group, will have a low Gothic tower rising above the main entrance. The first floor is to be for class rooms, all connected by a cloister which will run along the westerly face of the building. This cloister will open directly upon a terrace which affords an outlook toward the Harvard buildings. It is intended that the quadrangle thus formed should finally be inclosed, or partially inclosed, by the erection of other buildings. As soon as the growth of the seminary requires a dormitory a wing will be added on the north end of the group to correspond with the present stack-room wing. This will balance the front of the facade, which is now finished, toward the north with a commons hall. This room will be a high-timbered hall with large fireplaces and designed as a recreation and meeting place for the students. It will form the connecting link between the dormitory and the administration building. The second floor of the administration building will have a chapel to seat 200. In addition there are to be several professors' and administrative rooms on this floor. The upper part of this building and the upper tower floors will be given over temporarily to dormitory purposes. The buildings will be of stone with limestone trimmings. Work will be begun as soon as estimates are received. The buildings should be completed by next spring, possibly in time for the second term of the academic year.

*FORT STRONG (Boston post-office), MASS.—Bids are asked by Capt. A. M. Miller, Constr. Q. M., 263 Summer St., Boston, until 10 a. m., April 10, for the construction, plumbing, heating, electric wiring and fixtures of the following buildings at Fort Strong, Boston Harbor, Mass.: One double set officers' quarters, one double set N. C. O.'s quarters, one quartermaster's storehouse.

PAWTUCKET, R. I.—The contract for the construction of an extension to the U. S. public building at Pawtucket, R. I., has been awarded by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C., to the MANDIT CONSTRUCTION CO., of 25 West 43d St., New York, at $44,935, plus for painting old building, $675; total amount, $45,610. Time to complete, April 15, 1911.

NEW HAVEN, CONN.—From a number of dormitory plans submitted in competition the committee in charge of the Wright Memorial, to be erected at Yale University, has selected those prepared by the firm of architects Delano & Aldrich, 4 East 39th St., New York. This committee was appointed by the Chairman of the Alumni meeting at commencement, June, 1909, to devise and provide a suitable memorial to commemorate the service of Prof. Henry P. Wright as Dean of Yale College. At a meeting held last fall the Wright Memorial Committee decided upon the erection of a dormitory. The Yale Corporation has granted the Committee permission to erect a dormitory at Elm and High Sts., including the site of Alumni Hall. The accepted plans provide for 130 bedrooms. The cost of the building will be about $250,000. The officers of the Wright Memorial Committee are Noah H. Swayne, 2d, Chn.; Cornelius Vanderbilt, Treas.; Louis C. Hay, 60 Broadway, New York, Secy.; and Albert Woodruff Gray, 78 Wall St., New York, Asst. Secy.

NEW YORK, N. Y.—CHARLES A. COWEN & CO., 1123 Broadway, have secured the general contract to erect the 4-story addition, 65 x 75 ft., to the department store at the northwest corner of Sixth Ave. and 18th St., for Greenhut & Co. Estimated cost, $15,000. Buchman & Fox, 11 East 59th St., are Archs.

George Considine has taken a lease for 63 years on the property running from 147 to 151 West 43d St., adjoining the Hotel Cadillac, and will erect a 6-story hotel there which he will call the New Metropole, it is stated. The buildings on the property will be torn down May 1 and the hotel will be completed by Oct. 1. The hotel and furnishings will cost $250,000. There will be 75 rooms for guests. The first floor will be devoted to a restaurant, cafe and the hotel offices.

The HEDDEN CONSTRUCTION CO., 1 Madison Ave., has secured the general contract to erect a 12-story addition to the building of the Automobile Club of America, 91 x 100 ft. Cost, $210,000. C. P. H. Gilbert, 1123 Broadway, is Arch. WALKER & CHAMBERS, 50 East 20th St., have the steam heating contract.

D'Oench & Yost, Archs., 289 Fourth Ave., have filed plans for the Germania Life Insurance Co. for the proposed 20-story office building to be erected for the company at the northeast corner of Fourth Ave. and 17th St., south of the proposed 20-story building on the site of the old Clarendon Hotel. The building will be the French Renaissance design, with a tall mansard containing the top four floors, and will be of brick and granite, having an avenue frontage of 80 ft. and a frontage of 115 ft. in the street. It will be 281 ft. high, finished with a decorative balcony running along the third story, and massive pillars supporting clustered lamps at the entrance. The building is to cost $1,000,000.

NEW YORK, N. Y.—Plans have been filed for a 12-story mercantile building, to be erected at a cost of $400,000 at 16 and 18 West 22d St., running through to 15 and 17 East 21st St., for the Building & Engineering Co. William H. Birkmire, 396 Broadway, is Pres. and Arch.

Moore & Landsiedel, Archs., Third Ave. and 148th St., will have plans ready by March 28 for 13 4-story brick tenements to cost a total of $2,605,000. Three will be at the northeast corner of 179th St. and Daly Ave., three at the northeast corner of 179th St. and Vyse Ave., three at the northwest corner of 179th St. and Vyse Ave., four on the north side of 179th St., 83.22 ft. west of Vyse Ave., all will be 37.6 x 67 ft., and will have steam heat, electric light, and all modern improvements. Barry Bros., 2804 Third Ave., are the owners and will handle the entire contract. Work will proceed at once.

Plans have been filed for a 6-story apartment house, to be erected at a cost of $175,000, from designs by F. M. Wright, 489 Fifth Ave., Arch., for the Mutual Apartment Co., of which Frank Kling is Pres., at the northeast corner of Wadsworth Ave. and 180th St.

A 12-story loft and store building is to be erected at 150 to 154 West 22d St., from designs by Browne & Almiroty, 3 West 29th St., Archs., for the Marmac Construction Co. The cost will be $225,000.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, until 3.30 p. m., April 4, for the general construction, etc., of new Public School No. 167, on Eastern Parkway, Schenectady Ave. and Lincoln Pl., Boro. of Brooklyn.

NEW YORK, N. Y.—WELLS BROS., 160 Fifth Ave., have secured the general contract to erect the proposed 12-story physicians' building, 60 x 86 ft., at 40-44 East 41st St., for S. M. Warner, 79 Wall St. Estimated cost, $300,000. Israels & Harder, 31 West 31st St., are Archs.

The M. R. L. Building Co., S. Levy, Pres., has filed plans for two 8-story brick apartments to be built on the north side of 99th St., 200 ft. west of West End Ave. They will cost $400,000 and will be built from plans by G. F. Pelham, Arch., 507 Fifth Ave.

Plans are being prepared by Chester Hewes Kirk, Arch., 1133 Broadway, for a 12-story loft building, to cover the plot 75 x 98.9 ft., at 5, 7 and 9 West 37th St. Operations will not be begun before July 1. The building contract has been awarded to the GEORGE A. FULLER CO., Flatiron Bldg.

Plans have been prepared by Rouse & Goldstone, 12 West 32d St., for a 12-story elevator apartment house, 140 x 100 x 112 ft., to be erected by the Highwood Realty & Construction Co., Julius Weinstein, Pres., at the north corner of Riverside Drive and 99th St. on the former Furniss estate. The facade will consist of limestone, light brick and terra cotta. The estimated cost is $650,000.

NEW YORK, N. Y.—We are officially advised that the Charles F. Noyes Co., 92 William St., has perfected the financial arrangements for the construction of a 16-story office building to be erected at 51 to 57 John St., northeast corner of Dutch St. The building will be erected by the Underwriters' Building Co., comprising J. G. Hilliard and John A. Eckert. Howells & Stokes, 100 William St., are Archs. The lower stories will be of limestone, and the upper portion of light brick faced with terra cotta trimmings, surmounted with a Spanish tiled roof. There will be four high-speed electric elevators. The cost will be about $600,000. The structure will cover an area of 7,200 sq. ft., having a frontage of 81 ft. on John St. and 87 ft. on Dutch St. By reason of the 6-story Golden Hill Building on the east, the new building will have light on all four sides on the nine upper floors. Contracts probably will be let within a month.

The Willis Construction Co., 1839 Harrison Ave., will erect a 10-story elevator apartment house, covering a plot 105.81 x irregular, at the southeast corner of Riverside Drive and 156th St., to cost about $400,000. The plans are being prepared by Schwartz & Gross., 347 Fifth Ave.

NIAGARA FALLS, N. Y.—Plans are being prepared for a 300-room hotel, of fireproof construction, four stories in height, to replace the old Cataract House. A large convention hall, ball room, roof garden and high observation tower will be features. The new hotel will cost $500,000.

BUFFALO, N. Y.—The Alling & Corey Co., 225 Washington St., is having plans prepared for a 6-story and basement paper warehouse, 60 x 150 ft., with a wing, 30 x 130 ft., which it will erect at Elm and North Division Sts. Geo. Alling is Pres., Rochester, N. Y.

Esenwein & Johnson, Archs., 777 Ellicott Square Bldg., have prepared revised plans and are receiving bids for a theater, 80 x 160 ft., at Genesee and Pearl St., for the Shea Amusement Co. M. Shea is Pres. Cost, $60,000.

Plans are being prepared by Williams Lansing, 371 Pearl St., Arch., for the Managers of the Children's Hospital for a contagious disease pavilion, to cost approximately $30,000, and for a nurses' home to cost $45,000, to be erected adjoining the Children's Hospital on Goodrich St. The site has been acquired, but only a portion of the funds for the buildings have as yet been provided for.

JAMESTOWN, N. Y.—Bethune, Bethune & Fuchs, Archs., 215 Franklin St., Buffalo, are preparing plans for a fireproof hotel, 250 x 120 ft., six stories, to be erected at the corner of Cherry and Third Sts. Estimated cost, $400,000. It is to replace the Sherman House, which was destroyed by fire recently. Charles Samuels, owner; Geo. F. Hurlbert, lessee, Jamestown.

SCHENECTADY, N. Y.—An ordinance has been passed by the Schenectady Common Council authorizing the bonding of the city to the amount of $300,000. The proceeds will be used for the erection of a 12-room school building on Union St.; the erection of a building to be used as an annex to the High School; and for the construction of an additional story on the Albany St. school.

*BAYONNE, N. J.—Bids are asked by the Board of Education of the City of Bayonne, at the office of the Board of Education, Avenue C and 26th St., Bayonne, N. J., until 8.30 p. m., April 14, for all labor and material necessary for the construction of Public School Building No. 11, between West 23d and West 24th Sts., in the City of Bayonne, N. J., and in accordance with plans and specifications at the office of Robert C. Hutchinson, Arch., 126 Liberty St., New York. Also for all labor and materials necessary for the construction of Public School No. 12, between West Tenth and West Eleventh Sts., in the City of Bayonne, N. J., and in accordance with plans and specifications by S. E. Gage and Donald G. Anderson, Archs., 3 Union Sq., New York. Plans for both buildings may be seen at the office of W. J. Tomlin, Secy., Avenue C and 26th St., Bayonne, N. J.

NEWARK, N. J.—The members of the Forest Hill Presbyterian Church at Highland Ave. and Heeler Parkway are considering the erection of a $50,000 church.

OCEAN GROVE, N. J.—Ground has been broken for the proposed $40,000 hotel which the Ocean Grove Camp Meeting Association is to erect at the corner of Main and Central Aves., Ocean Grove. The structure will be ready for occupancy this summer.

PHILADELPHIA, PA.—A. RAYMOND RAFF, 1635 Thompson St., has submitted the lowest bid of about $90,000 and has been awarded the contract for the erection of the Nixon Theatre, to be erected on the west side of 42d St. south of Ludlow St., for the Greater Philadelphia Realty Co. The John D. Allen Co., Betz Bldg., is Arch.

Estimates are being taken by E. F. Fonder, Land Title Bldg., on plans for a 4-story apartment house, 105 x 145 ft., to be built at the northwest corner of 44th and Walnut Sts., for Meyer Rosenstein. The building will contain 36 suites of housekeeping apartments of seven and eight rooms each. The cost will be about $150,000. Milligan & Webber are Archs., 520 Walnut St.

WASHINGTON, PA.—Mowbray & Uffinger, 56 Liberty St., New York, have completed plans for a 2-story bank, 60 x 130 ft., to be erected by the Citizens' National Bank, at Washington, Pa., and to cost $200,000.

PITTSBURG, PA.—Bids are asked by Capt. F. E. Phelps, Acting Q. M., Pittsburg, until March 30 for repairs to eight buildings.

VANDERGRIFT, PA.—The DUQUESNE CONSTRUCTION CO., Bessemer Bldg., Pittsburg, has been awarded a contract for the $50,000 church building to be erected by the Vandergrift Roman Catholic Parish. Ground will be broken this month.

BUTLER, PA.—The Baltimore & Ohio R. R. Co. has completed plans and will begin extensive improvements near Butler, Pa., to cost $80,000. The improvements provide for the erection of a passenger station and for track elevation. Work will begin at once. A. M. Kinsman, Baltimore, is Ch. Engr.

DANVILLE, VA.—The following bids were received by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., on March 16, for the construction of an extension to the U. S. public building at Danville, Va.: D. J. Phipps, Newport News, Va., $54,320; Joseph Seay, Petersburg, Va., $53,350; Richardson & Burgess, Washington, D. C., $49,707; Cecil L. Saunders, Clifton Forge, Va., $60,000; R. H. Richardson & Son, Hampton, Va., $44,872; Neptune B. Smith, New York, $62,773.

*RICHMOND, VA.—Bids were received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., on March 17, for the construction of the U. S. post-office, court-house and custom-house at Richmond. The contract has been let to J. HENRY MILLER CO., 106 Dover St., Baltimore, Md. The plans call for a steel frame structure 168 x 140 ft., of granite exterior and with slag roofing. The structure will on Main St., near Tenth and Bank Sts.

RICHMOND, VA.—Plans are being prepared by the firm of Dimmock & Lee, State Bank Bldg., for a 14-story steel and concrete office building, to stand on Main St., east of the First National Bank, replacing four 1-story buildings on the north side of Main St., between Eleventh and Twelfth. The exact cost of the building has not yet been fixed, nor will the detailed drawings be ready to be filed in the office of the Building Inspector until April 1. The owner will be the Richmond Building Corporation, the building to be erected for general office purposes.

CLARKSBURG, W. VA.—E. E. Pruitt, Arch., Y. M. C. A. Bldg., Columbus, Ohio, has been retained by the Masonic Lodge at Clarksburg to prepare plans for a Masonic Temple to cost $60,000. It is to be of brick, three stories in height, and besides a lodge room there will be billiard rooms, ladies' parlors, reception room, committee room, etc. It will be heated by steam.

CONCORD, N. C.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., April 19, for the construction (including plumbing, heating apparatus, electric conduits and wiring) of the U. S. post-office at Concord.

FORT DADE (Egmont post-office), FLA.—We are officially advised that bids were received on March 12 by the Constructing Q. M. for constructing a double company storehouse at this post. The lowest bid was submitted by W. M. Baxter, of Bradentown, Fla.

INVERNESS, FLA.—We are officially advised that Masonic Lodge Citrus, No. 118, decided to build a 3-story temple, 64 × 90 ft. Plans have been adopted but date of contract has not yet been fixed.

Bids are asked by the Citrus County Commissioners until noon, April 4, for a county jail. W. B. Talley, Jacksonville, Fla., is Arch.

SHREVEPORT, LA.—We are officially advised that a joint freight and passenger terminal is to be built here by the St. Louis Southwestern Ry. Co. Cost, about $40,000. J. S. Berry is Supt. of Bridges and Bldgs., Tyler, Tex.

Commercial National Bank of Shreveport has purchased property at corner of Texas and Market Sts. and will erect a 10-story bank and office building of steel and concrete at a cost of about $250,000. Peter Youree, Pres., has announced that this will not interfere with plans for the proposed hotel on opposite corner to cost between $200,000 and $300,000, which is to be financed by him, and which was noted on March 3.

COLUMBUS, OHIO.—The plans will be ready soon for a $40,000 stable to be built by the Columbus Garbage Department at the garbage disposal plant. Henry Maetzel is City Engr.

Marriot & Hayden, Hayden Bldg., are drawing plans and specifications for an auditorium and exhibition hall to be erected on the site of the Columbus Auditorium, West Goodale St., which recently collapsed under the weight of snow.

CLEVELAND, OHIO.—Hubbell & Benes, Archs., Citizens Bldg., will draw the plans for a central Y. M. C. A. building. The decision was reached at a meeting of the association Building Committee March 8. The Building Committee appointed by the Board of Trustees to erect the building consists of Charles E. Adams, Chn., Ambrose Swasey, H. A. Sherwin, John L. Severance, E. H. Baker, F. G. Smith and F. S. McGowan.

YOUNGSTOWN, OHIO. — Albert Kahn, Arch., Trussed Concrete Bldg., Detroit, has let the structural iron contract for the proposed 10-story and basement bank building, 50 × 80 ft. for the Mahoning National Bank, of Youngstown, to the FOREST CITY STEEL & IRON WORKS, of Cleveland, Ohio.

COLUMBUS, OHIO.—We are officially advised that the bids received for erection of the West Broad St. and the Heyl Ave. schools were rejected by the Columbus Board of Education at a recent meeting. These contracts will be readvertised. H. P. Judd is Clerk. A complete list of bids was given last week.

CHICAGO, OHIO.—The Baltimore & Ohio R. R. Co. has awarded a contract for the construction of a freight terminal at Chicago Junction, Ohio, on the main line of the Chicago division. The improvement will cost $1,500,000. It includes a gravity, or "hump," classification yard having a capacity of 3,900 cars, with necessary yard buildings, scales, etc., and a reservoir of 200,000,000 gallons capacity, perhaps the largest ever built for railroad use. The freight terminals will contain receiving and classification yards for eastbound and westbound traffic, the capacity of the former being 2,000 cars and the latter 1,900 cars. It is estimated that 95,000 cu. yds. of excavation and 4,500 cu. yds. of concrete will be necessary in constructing the terminal. The contract has been awarded to the ROBERT GRACE CO., of Cleveland, Ohio. Work will be started at once.

TERRE HAUTE, IND.—The School Board has decided to ask for bids for the construction and equipment of a second high school building on the North Side.

INDIANAPOLIS, IND.—We are officially advised that the Indianapolis Union Ry. Co. has ordered plans for remodeling and enlarging Union Station. Bids will be in order soon. Estimated cost, $75,000. D. A. Bohlen & Son, 1017 Majestic Bldg., Indianapolis, are Archs. P. J. Landers is Engr. M. W.

The city has taken steps toward the erection and equipment of a $1,000,000 city hospital building.

The Trustees of the Grace Cathedral, Central and 16th Sts., will erect a $50,000 structure this spring. This building will have a 90-ft. tower. Alfred Grindle, American Central Life Bldg., is Arch.

Brubaker & Stearns, Archs., 23 North Pennsylvania Ave., have been employed to make the plans and receive bids for the erection of a county house in Clay County.

LA FAYETTE, IND.—Bids are asked by the Commissioners of Kosciusko County, at Warsaw, Ind., until April 13, for the erection of a cottage at the State Soldiers' Home, near La Fayette.

KOKOMO, IND.—The contract for the Kokomo Y. M. C. A. building has been awarded to MOORE & DANNER, at $86,000. The contracts for equipments and lighting is yet to be let.

LOGANSPORT, IND.—A site has been purchased on which the Fort Wayne & Wabash Valley Traction Co., of Fort Wayne, will construct a $50,000 passenger and freight station.

DELPHI, IND.—The Commissioners of Carroll County will receive bids for the construction of a county infirmary.

*GREENCASTLE, IND.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., April 20, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Greencastle, Ind.

DETROIT, MICH.—The following contracts have been awarded by the Board of Education, William J. Lee, Secy., 50 Broadway, Detroit, and Malcomson & Higginbothom, Archs., 404 Moffat Bldg., for the Clippert School, two stories and basement, 145 × 97 ft., to cost $68,000: Structural iron work to H. B. LEWIS, 45-57 Joseph Campeau Ave.; masonry to W. H. TRAVIS, 335 Fifth St.; carpentry to L. H. LEVERENS CO., 1131 Bellevue Ave.; slate roofing to AMERICAN ROOFING CO., 634 Beaufait Ave.; blower heating system to YOUNG BROS., 313 Franklin St.; plumbing to BURNS & WILLARD, 2203 Fort St., West; electric work to McCLEARY-HARMON CO., 423 Stevens Bldg.

The following contracts have been let for the Nichols School, 150 × 95 ft., and to cost $68,000, Structural iron work to H. B. LEWIS, 45-57 Joseph Campeau Ave.; masonry to FRANK N. COOPER, Penobscot Bldg.; carpentry to L. H. LEVERENS CO., 1131 Bellevue Ave.; blower heating system to JACOB ZERGA, 78 Larned St.; plumbing to O'CONNOR BROS., Penobscot Bldg.; electric work to McCLEARY-HARMON CO., 423 Stevens Bldg.

Donaldson & Meier, Archs., Penobscot Bldg., Detroit, are preparing plans and specifications for a 2-story and basement bank building for the Peoples' State Bank, Fort and Shelby Sts., Detroit. The proposed bank is to be located at Woodward Ave. and North Grand Boulevard.

Varney, Winter & Varney, Archs., 58-62 Equity Bldg., Detroit, are taking figures on a 3-story and basement store building, located at Grand River Ave. and Washington Boulevard, Detroit, for P. N. Doty, of Grand Rapids, Mich. Stock brick, Bedford cut stone, composition roof, galvanized iron cornice and structural iron work will be used in construction.

Rogers & MacFarlane, Archs., 1310 Penobscot Bldg., Detroit, are taking figures on a sixth and seventh story addition and for remodeling the old building, 60 × 100 ft., for Newton Annis Co., 237-41 Woodward Ave., Detroit. Press and stock brick, Bedford cut stone, composition roof and structural iron will be used in construction.

The Wabash R. R. Co. will erect, in early spring, a freight house at the foot of Ferdinand Ave., Detroit. John S. Sim is Supt., 204 Fort St., Detroit.

KALAMAZOO, MICH.—John H. Burke, Secy. of Arcade Co., of Kalamazoo, Mich., will let contracts soon for the materials to be used in the construction of the proposed Burdick Hotel and Burke Office Building. Both buildings will be fireproof, of steel, concrete, terra cotta and stone construction. The hotel will be eleven stories high, 83 × 132 ft., with an L 32 × 60 ft. The office building will be eight stories, 50 × 132 ft.

ANN ARBOR, MICH.—H. W. Pipp, Arch., Ann Arbor, Mich., is preparing plans and specifications for a residence, with three stories and basement, 80 × 80 ft., for C. N. Lockwood, of Ann Arbor, Mich. Paving brick, brick veneer and stucco are to be used in construction. Cost, about $40,000.

CHICAGO, ILL.—A high school building, to cost $100,000, is to be erected in Austin on the property, 150 × 178 ft., at the northwest corner of Central Ave. and Washington Boulevard, by St. Patrick's Academy. The building will be fireproof, five stories and basement. One feature will be an auditorium, occupying the first and second floors of the south wing.

CHICAGO, ILL.—The first of the branch libraries to be built by the Public Library Board, as outlined in the new plans for enlarging the influence of that institution, will be erected in Englewood, at the northeast corner of Normal Boulevard and 62d St. On a plot of ground fronting 120 ft. on the boulevard and with a depth of 90 ft. on 62d St., a building costing $50,000 will be erected. The library will be known as the Hiram Kelly branch, and it will embody, on a reduced scale, all of the facilities of the central institution. It will have two stories.

MILWAUKEE, WIS.—Edward Schuster & Co., department store owners, Third St. and Garfield Ave. and Eleventh and Winnebago Sts., have commissioned Brust & Philipp, Archs., 82 Wisconsin St., to prepare plans and specifications for a 3-story business block to be erected at northwest corner Twelfth and Vliet Sts., of reinforced-concrete construction, 100 × 120 ft. Estimated cost, $200,000.

ST. PAUL, MINN.—The Golden Rule Department Store, Seventh and Robert Sts., will build a 4-story addition of pressed brick and cut stone, according to plans of C. H. Johnston, 715 Manhattan Bldg., Arch. The contract has been let to the ST. PAUL BUILDING CO., 460 Rice St. Cost, $100,000.

Reed & Stem, Endicott Bldg., Archs., are preparing plans for a 9-story pressed brick and cut stone fireproof addition for the West Publishing Co., law book publishers, on Third St., near St. Peter St. The building will have steam heating, electric lighting and electric elevators. Cost, $250,000.

Col. J. H. Davidson, city, has awarded the contract for adding three stories to the 13-story Pioneer Press Building to the GEORGE J. GRANT CONSTRUCTION CO., 709 New York Life Building. Plans were prepared by S. S. Beman, Arch., Fine Arts Bldg., Chicago, Ill. The addition will be built of reinforced concrete fireproof construction and four new electric passenger elevators will be installed. The improvement will cost $187,000.

ST. PAUL, MINN.—Clarence H. Johnston, Arch., Manhattan Bldg., St. Paul, has prepared plans for the basement of the service building to be erected at the city and county hospital. It will be 125 × 85 ft., with brick exterior. A portion of the interior will be lined with brick and there will be steam heat, electric wiring and lighting. The building will be used for a boiler room, cold storage and stack house and will be equipped with boilers, engines, tanks, pumps, economizers and other machinery.

ST. PETER, MINN.—Plans are being prepared by C. H. Johnston for the detention hospital at St. Peter, Minn. This will be 3-story, 182 × 37 ft., with wings, of brick exterior with cut stone, slate roof, hard wall plaster, hardwood interior finish and floors, with Kasota stone floors and wainscoting in the toilet rooms and plumbing. Heat and light will be furnished from central plants.

NORTHFIELD, MINN.—Plans are being prepared by Kinney & Jogerst, Archs., for a 4-room addition to one of the graded schools at Northfield, Minn. It will be of brick, 80 × 24 ft., 2-story and basement hardwood interior finish and floors, plumbing, steam heat, mechanical ventilation, blackboards, electric wiring and bells. The first floor will be of reinforced concrete covered by wood. Cost, $70,000.

FARIBAULT, MINN.—Plans have been prepared by Clarence H. Johnston, Arch., Manhattan Bldg., St. Paul, for a working girls' cottage to be erected at the State School for Feeble-Minded at Faribault. It will be 3-story, 122 × 35 ft., exterior of concrete, with the roof. The building will have hardwood floors, but there will be no finish except the floor and window frames, which will be hardwood. The toilet rooms will have Kasota stone floors and wainscoting and there will be plumbing. Heat and light will be supplied from a central plant. As much of the construction work as possible will be done by inmates of the institution.

*ROCHESTER, MINN.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., April 26, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Rochester, Minn.

KANSAS CITY, KAN.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., April 25, for the extension, etc., except elevator (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Kansas City, Kan.

LAWRENCE, KAN.—Plans for an administration building, which is to cost $250,000, for the University of Kansas, have been completed. They were prepared by Prof. W. A. Griffith of the Dept. of Drawing and Painting at Topeka, Kan.; Prof. W. A. McArdle, Lecturer on Architecture, and the State Architect. The architectural style of the new building will be classical Renaissance. Its principal dimensions are: Length, 480 ft.; width of wings, 170 ft. The central section is 130 ft. × 130 ft., and the smaller sections on each side are 65 × 65 ft. The wings will be three stories, the central section four stories and the intermediate sections two stories in height. There will be a rotunda at the center of the building. This will be 60 ft. in diameter and will extend through the entire four stories. It is to be lighted through the flat dome. The present appropriation of $125,000 will be used to construct the east wing of the building. Excavation work has already begun, and when the good weather comes the work will be pushed to completion. It is planned that the remaining wing and the central part will be built in the succeeding two years.

LANDER, WYO.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., May 2, for the construction (including plumbing, gas piping, heating and ventilating apparatus, electric conduits and wiring and standard clock system) of the U. S. post-office at Lander.

KANSAS CITY, MO.—A 12-story office structure is to replace the burned Rialto Building at the southwest corner of Ninth St. and Grand Ave. Albert Marty is owner of the site. Work on the building will begin just as soon as the architect finishes the plans. It is Mr. Marty's intention to have it ready for occupancy within a year. The cost will be approximately $700,000. It will face Grand Ave. and will be 96 × 115 ft.

KANSAS CITY, MO.—A union terminal railroad station is to be erected here which will cost nearly $6,000,000 for the building alone, according to the official estimates just announced by H. L. Harmon, Pres. of the Kansas City Terminal Co., and the entire cost of improvements, including tracks, other buildings and real estate, will be about five times that sum. The "Manufacturers' Record" states that the plans of the company include a union passenger station, centrally located, between Wyandotte and Main Sts. and 21st and 24th Sts., covering about 51 acres, to contain at the outset 18 parallel tracks, with space for six more, a total of 24 tracks, capable of accommodating 48 trains simultaneously. Estimated cost of station building, exclusive of land and tracks, $5,700,000. The plans include also about 188 miles of main and industrial railroad tracks, four local freight stations, passenger, freight and switching yards, roundhouses and shops, as well as the union passenger station. The estimated cost as now intended, including real estate, is about $30,000,000. Construction should be completed within the next three years. The greater part of the real estate has been acquired. An ordinance adopted by the Common Council of the city of Kansas City and approved at a city election, has been accepted by the company, which is prepared to begin construction as soon as the Council shall have passed supplementary ordinances vacating certain streets and alleys essential for use by the Terminal Company. The proprietary companies interested in the terminal are the Santa Fe System, the Chicago & Alton, the Burlington, the St. Paul, the Rock Island, the Missouri, Kansas & Texas, the Missouri Pacific, the Frisco, the Union Pacific and the Wabash lines.

ST. LOUIS, MO.—A wholesale building, to cost $150,000, will be erected on the 50-ft. lot east of 1331 Washington Ave., by James C. Crowdus, a Main St. wool merchant. Mr. Crowdus purchased the lot from the Anette Realty Co., through the Weisels-Gerhart Real Estate Co. The lot, which begins 214 ft. west of 13th St., has a depth of 131 ft. to Lucas Ave. The wholesale building to be erected on the lot will be under the control and management of the Weisels-Gerhart Real Estate Co., 104 North Eighth St.

HOT SPRINGS, ARK.—The contract for constructing an extension to the U. S. public building at Hot Springs, Ark., has been awarded to CECIL SAUNDERS, of Clifton Forge, Va., at $47,000; less for extending the time for completion, $600; for omitting pipe coverings, $225; net amount, $46,175. Time for completion, Aug. 1, 1911.

GALVESTON, TEX.—The War Department, Washington, D. C., has decided to erect an armory at Fort Creckem, west of the city, for the coast artillery companies of the Texas National Guard. The armory will cost $75,000.

*DENVER, COLO.—On March 15 the following bids were received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction, including plumbing and drainage, of the U. S. post-office and court-house at Denver:

John Gill & Son, 12 West 31st St., New York, $1,317,000 for Cherokee marble, 24 months; $1,310,000 for light gray granite, 18 months; $949,000 for Indiana limestone, 18 months; $1,249,000 for marble exterior finish with limestone light courts, 22 months; $1,205,000 for granite exterior facing with limestone light courts, 18 months.

Thompson-Starrett Co., 49 Wall St., New York, $1,483,000 for Colorado Yule marble, 24 months; $1,394,000 for New Hampshire granite, 16 months; $1,044,000 for Indiana limestone, 10 months; $1,409,000 for marble exterior facing with limestone light courts, 24 months; $1,290,000 for granite exterior facing with limestone light courts, 16 months.

James Stewart & Co., 30 Church St., New York, $1,362,000 for marble, 26 months; $1,309,000 for granite, 17 months; $985,000 for Indiana limestone, 17 months; $1,294,000 for marble exterior facing with limestone light courts, 26 months; $1,206,000 for granite exterior facing with limestone light courts, 17 months.

Hedden Construction Co., 1 Madison Ave., New York, $1,321,182 for Colorado Yule marble, 20 months; $1,296,982 for granite, 18 months; $949,742 for Indiana limestone, 18 months; $1,251,182 for marble exterior facing with limestone light courts, 18 months; $1,187,482 for granite exterior facing with limestone light courts, 18 months.

P. J. Carlin Construction Co., 16 East 23d St., New York, $1,374,000 for Cherokee marble, 18 months; $1,262,000 for Mt. Airy granite, 18 months; $974,000 for Indiana limestone, 18 months; $1,280,000 for Cherokee marble exterior facing with limestone light courts, 18 months; $1,434,000 for Mt. Airy granite exterior facing with limestone light courts, 18 months.

H. L. Brown Co., 225 Fifth Ave., New York, $1,340,000 for Georgia marble, 20 months; $1,234,000 for green granite, 18 months; $989,000 for Bedford limestone, 18 months; $1,299,000 for marble exterior facing with limestone light courts, 18 months; $1,139,000 for granite exterior facing with limestone light courts, 18 months; $1,399,000 for Georgia marble, 20 months; $1,450,000 for Colorado Yule marble, 24 months; $1,295,000 for Hallowell white granite, 18 months; $1,345,000 for colored waterly granite, 20 months; $1,350,000 for Georgia marble exterior facing with limestone light courts, 20 months; $1,345,000 for Colorado Yule marble exterior facing with limestone light courts, 18 months; $1,199,500 for Hallowell white granite exterior facing with limestone light courts, 18 months; $1,244,000 for Columbia Westerly granite exterior facing with limestone light courts, 20 months.

Richard Heningham 1 Madison Ave., New York, $1,347,202 for Georgia marble, 30 months; $1,336,419 for Concord granite, 24 months; $1,282,852 for marble exterior facing with limestone light courts, 24 months; $1,207,024 for granite exterior facing with limestone light courts; $996,828 for Indiana limestone.

A. H. Wiese, South Omaha, Neb., $1,430,000 for Cherokee marble, 30 months; $1,395,000 for granite, 20 months; $998,000 for Bedford limestone, 20 months; $1,360,000 for marble exterior facing with limestone light courts; $1,262,000 for granite exterior facing with limestone light courts, 20 months.

W. H. Maxwell, Tacoma, Wash., $1,476,200 using eastern marble, 30 months; $1,364,200 for granite, 18 months; $1,022,200 for Indiana limestone, 18 months; $1,267,200 for granite exterior facing with limestone light courts, 18 months.

Sound Construction Co., Seattle, Wash., $1,461,131 for Colorado marble, 22 months; $1,425,175 for Concord granite, 20 months; $1,079,699 for Bedford limestone, 20 months; $1,383,175 for marble exterior facing with limestone light courts, 22 months; $1,371,348 for granite exterior facing with limestone light courts, 20 months.

Frank Damascio, Denver, Colo., $1,394,900 for granite, 30 months; $995,675 for New

Hampshire pink granite, 28 months; $1,289,300 for granite exterior facing with limestone light courts, 30 months.

Charles McCaul Co., Tenth and Sansom Sts., Philadelphia, Pa., $1,304,558, using Pennsylvania marble, 30 months; $1,218,558 for granite, 25 months; $948,318 for Bedford limestone, 24 months; $1,225,058 for marble exterior facing with limestone light courts, 30 months; $1,145,058 for granite exterior facing with limestone light courts, 25 months; $1,358,558 for Colorado Yule marble exterior facing with limestone light courts, 30 months; $1,205,058 for Pennsylvania marble exterior facing with limestone light courts, 30 months; $1,324,558 for Clarendon marble.

Paul Reisen's Sons, 1022 Humboldt St., Milwaukee, Wis., $1,590,000 for Colorado marble, 24 months; $1,497,000 for Woodbury gray granite, 22 months; $1,070,000 for Bedford limestone, 20 months; $1,490,000 for Colorado marble exterior facing with limestone light courts, 24 months; $1,351,000 for granite exterior facing with limestone light courts, 22 months.

Con[illegible] Bros. Co., Lowell, Mass., $1,380,000 for Pennsylvania or Vermont marble, add for colored Yule $75,000, 20 months; $1,42[illegible] for granite, 20 months; $1,000,000 for Bedford limestone, 20 months; $1,340,000 for marble exterior facing with limestone light courts, 20 months; $1,330,000 for granite exterior facing with limestone light courts, 20 months.

Wells Bros. Co., 98 Jackson Boulevard, Chicago, Ill., $1,474,000 for white marble, add for Colorado Yule $55,000, 20 months; $1,467,000 for New Hampshire granite, 18 months; $1,093,000 for Bedford limestone, 17 months; $1,364,000 for marble exterior facing with limestone light courts, 18 months; $1,345,000 for granite exterior facing with limestone light courts, 18 months.

M. P. Wells, Witherspoon Bldg., Philadelphia, Pa., $1,540,000, using Cherokee marble; $1,467,000, using gray granite; $1,093,000 for Indiana limestone; $1,467,000 for Cherokee marble for facing exterior with light courts of limestone; $1,345,000, using gray granite for exterior facing, with limestone light courts.

Northwestern Construction Co., Waupeton, N. Dak., $1,520,000, using Vermont marble; $1,485,000 for New Hampshire granite; $1,465,000 for Mt. Airy granite; $1,445,000 for Northfield granite; $1,110,000, using Indiana limestone; $1,469,791 for Vermont marble exterior facing with limestone light courts; $1,388,391 for New Hampshire granite exterior facing with limestone light courts; $1,380,491 for Mt. Airy granite exterior with limestone light courts; $1,350,000 for Northfield granite exterior with limestone light courts; time as specified.

Hiram Lloyd Building & Construction Co., 816 Olive St., St. Louis, Mo., $1,408,773, using Cherokee marble; $1,360,773, using gray granite; $1,084,826, using Bedford limestone; $1,341,629 for marble facing with limestone light courts; $1,272,629 for gray granite exterior facing with limestone light courts; time, 22 months.

Seerie Bros., Denver, Colo., $1,479,600 for Mt. Airy granite, 30 months; $1,175,156 for Bedford limestone, 24 months; $1,392,606 for granite exterior facing with limestone light courts, 30 months.

Henry Bergie, Milwaukee, Wis., $1,589,500, using marble, 22 months; $1,439,500, using granite, 22 months; $1,145,500, using limestone, 20 months; $1,501,000 for marble exterior facing with limestone light courts; $1,327,500, using granite exterior facing with limestone light courts; time, 20 months.

DENVER, COLO.—Contracts have been let to the WHITE STEAM CONSTRUCTION CO. to build the Denver City Tramway Co. office building at 14th and Arapahoe Sts. The building is to be eight stories high, and will contain 200 offices. The aggregate cost, including the ground, will be $750,000. With the new car barns that are to be constructed the improvements will extend from 14th St. to 13th St. The building will contain an auditorium and a school for motormen and conductors. William E. Fisher & Bro., Railway Exchange, Denver, are Archs.

PUEBLO, COLO.—Arrangements have been completed for the construction of a business building by the Wachusett Investment Co., of which G. Henry Whitcomb, of New York, is Pres., and George D. Meston, of Pueblo, is Secy. The structure will be three stories high, will cost $50,000, and will be erected at Fourth St. and Santa Fe Ave. Work will be started April 1. The ground floor will be used for storerooms and the upper stories for offices and living rooms.

ALBURQUERQUE, N. MEX.—The contract for erection of a Masonic temple has been awarded to E. A. GERTIG at $50,000.

BREMERTON, WASH.—Bids are asked by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., May 7, for two officers' quarters at the U. S. Navy Yard, Puget Sound, Wash. Specifications are on file at the office of Engineering News, New York.

BREMERTON, WASH.—Bids are asked until 11 a. m., May 7 (date changed from April 23), by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Washington, D. C., for constructing a general storehouse at the U. S. Navy Yard, Puget Sound, Wash. Specifications are on file at the office of Engineering News, New York.

PORTLAND, ORE.—Plans have been prepared by Claussen & Claussen, Archs., Board of Trade Bldgs., for a 4-story brick apartment house to be built at the southeast corner of 14th and Taylor Sts. by C. H. Brown, at a cost of $50,000. An electric automatic elevator for both passenger and freight service will be installed.

REDLANDS, CAL.—A bond issue of $85,000 has been voted for the erection of a polytechnic high school.

LOS ANGELES, CAL.—Preliminary plans have been completed by Train & Williams, Archs., 254 South Broadway, for an administration building for the University of Southern California, which will be first of group of academic structures which that institution will erect on its 10-acre campus at 35th St. and Wesley Pl. The buildings will cost $1,000,000 when completed.

PASADENA, CAL.—Matthew Slavin will erect a 2-story brick theater, 135 × 201 ft., on West Colorado St. for the Mutual Building Co. Cost, $60,000.

The Eason Realty Co. announces that it will erect a 3-story brick building, 50 × 170 ft., at Colorado St. and Delacy Ave., to cost $100,000.

F. L. Roehrig, Arch., 408 Byrne Bldg., Los Angeles, is preparing plans for alterations to Hotel Green at Pasadena, Cal. The dining room in the west building will be enlarged and a palm room, with stained glass ceiling, will be built between the wings. The present Romanesque and Moorish parlors will be remodeled. The cost of improvements will be about $60,000.

SAN FRANCISCO, CAL.—James W. Coffroth has leased a site from the John von Bergen Co. for the erection of an auditorium at the southeast corner of Twelfth and Market Sts. The building will cover 82,500 sq. ft., having a frontage of 275 ft. on Market St., and 275 ft. in Twelfth St. It will be a Class A building of concrete, stone, brick and steel, with a seating capacity of 18,000 persons, 10,000 on the ground floor and 8,000 in the galleries. Albert Pissis, Flood Bldg., is Arch. of the Von Bergen Estate. O'Brien & Werner, Archs., 1683 Ellis St., will act for Mr. Coffroth, who will arrange the building so that at short notice it can be turned into a theater capable of accommodating 4,000.

A bath house will be erected at the beach for J. C. F. Mitchell, owner of the M. & M. Hotel, which will adjoin the bathhouse. The new structure will be on the east side of 49th Ave., 51.6 ft. south of B St. The cost will be $50,000. The architects are O'Brien & Werner, 1683 Ellis St. The building will be two stories high, with a plastered facade of the Roman type. The first floor will contain a large and spacious dining room. On the second floor are to be 66 baths for hot and cold salt water, equipped with needle baths, steam rooms, women's and men's massage rooms, etc.

SAN FRANCISCO, CAL.—The Knights of Pythias have taken out a permit to erect a 4-story brick store and lodge room building at the southeast corner of Hermann and Valencia Sts., at a cost of $80,000.

A permit has been issued to the Polk Street Investment Co. to erect a building of one story, reinforced concrete, on the site of the former Sutter St. R. R. power-house at the southeast corner of Polk and Sutter Sts., to cost $41,134.

SAN JOSE, CAL.—It is stated that $1,000,000 is to be spent by the Southern Pacific Co. in transferring its depot from the center of San Jose and placing it in the western suburbs adjoining the present West San Jose station. A right-of-way has been purchased by the railroad company for this project and a number of houses will be torn down to make room for the tracks. The change will mean the discontinuance of freight switching through the city. The Fourth St. line is to be converted into an electric line. A union depot is to be erected on the new site and the Market St. depot probably abandoned.

FALLON, NEV.—The Secretary of the Interior has granted an extension of 69 days to WILDES, ROBINSON & HAMMOND within which to complete their contract for the construction of an office building at Fallon, under the Truckee-Carson project. The contractors were delayed by severe weather and other causes beyond their control. This extension of time will advance the date of completion of the contract to May 9, 1910.

MONTREAL, QUE.—Following is the list of bids received by the Montreal Technical School Board for installing plumbing and heating system: TREMBLAY & FRANCOEUR, $73,642 (awarded contract); T. Latourelle, $94,995; Garth & Co., $74,750; James Ballantyne, $82,000; Evans, Almoralle & Co., $81,772; W. J. McGuire & Co., Ltd., $76,797.

OTTAWA, ONT.—A. Rosenthal & Sons, jewelers, will erect a 7-story store, 69 × 99 ft., on Sparks St., costing between $100,000 and $125,000.

WALKERVILLE, ONT.—Donaldson & Meier, Archs., Penobscot Bldg., Detroit, are preparing plans and specifications for a residence for Tracy W. McGregor, 239 Brush St., Detroit. The residence to be fireproof and is to be located above Walkerville, Ont., on Lake St. Clair.

NIAGARA FALLS, ONT.—The plans for the proposed armory to be erected by the Militia Department have been finished. The armory will be 75 × 110 ft., of red brick and white stone, and is to cost about $70,000. Sir Frederick Borden, Ottawa, is Minister of Militia and Defense.

TORONTO, ONT.—The Minister of Public Works of Ontario has awarded the contract for the new north wing of the Provincial Parliament Building to FRED HOLMES & CO., 1113 Yonge St., for $517,000. The new wing will contain the Library, Department of Education, Ontario Railway Board and Hydro-Electric Commission. Work will be started on the foundation, laid last fall, as soon as weather permits.

A warehouse and office building will be erected on King St. by Frederic Nicholls, Vice-Pres. and Gen. Mgr. of the Canadian General Electric Co., on land immediately adjoining the company's office at Simcoe and King Sts.

The T. Eaton Co. has taken out a permit to build a 5-story brick and steel store at 6 and 8 Queen St. West, to cost $57,000.

HAMILTON, ONT.—Stewart & Witton, Archs., Hamilton Provident & Loan Bldg., have taken out a building permit for three 3-story brick buildings to be erected on Macnab St., between King and Main Sts., for John A. Bruce, at $43,000.

REGINA, SASK.—The Trustees for the Methodist College to be erected here will proceed at once with plans for the building. About $350,000 is subscribed and pledged.

WINNIPEG, MAN.—A local syndicate will erect a $100,000 office building on Portage Ave. and Smith St. J. H. Sherman is financial agent.

The Public School Board will erect two schools at a cost of $80,000 each this year.

CALGARY, ALTA.—The contract was awarded to the CARTER, HALLS, ALDINGER CO., of Winnipeg, Man., for a 6-story business block for Leeson & Lineham. It will be of cement and concrete construction and will cost $125,000.

WATER-SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

HARTFORD, CONN.—The Board of Water Commissioners have voted to lay the following water mains: Kenyon St., from Elizabeth St. southerly for 300 ft.; Magnolia St., about 300 ft.; Shultas Place, 225 ft.; Mansfield St., 470 ft.

WATERBURY, CONN.—Bids will be received by the city until May 17 for the construction of the new concrete dam in the town of Morris. Estimated cost, $300,000. R. A. Cairns is Engr.

FORT ERIE, N. Y.—The citizens on March 15 voted in favor of constructing a municipal water-works system. Witmer & Brown, of Buffalo, are Engrs.

TRENTON, N. J.—The Water Board has selected Hering & Fuller, 170 Broadway, New York, to make preliminary investigation, etc., looking to the construction of the proposed water purification plant.

*ATLANTIC CITY, N. J.—We are officially advised that the Board of Water Commissioners on March 18 awarded contract to the HEINE SAFETY BOILER CO., Pennsylvania Bldg., Philadelphia, Pa., at $6,466, for furnishing and installing two 300-HP. horizontal water-tube boilers at the Absecon pumping station. L. Van Gilder is Engr. and Supt.

MEADVILLE, PA.—Contract for erecting brick chimney at city pumping station, bids opened on March 7, has been awarded to HEINE CHIMNEY CO., 115 Adams St., Chicago, Ill., at $1,392, without foundation.

MARIETTA, PA.—Bids will be received by the Marietta Water Co., of Marietta, until April 20 for laying a submarine line of about 2,200 ft. of 10-in. universal c.-i. pipe. F. H. Shaw, 314 Brennan Bldg., Lancaster, is Engr.

BALTIMORE, MD.—The BALTIMORE COUNTY WATER & ELECTRIC CO., Fred W. Foldner, Pres., 411 East Baltimore St., has contract to lay pipe lines throughout Ten Hills, suburban development.

NORTH EAST, MD.—G. A. M. Johnson, of Leslie, Md., is President of the company which proposes constructing water-works at North East. Estimated cost, about $20,000. Bids for construction will be received about May 1.

PARKERSBURG, W. VA.—The city proposes to construct reservoir, pumping station and pumping engines. No date yet has been set for receiving bids. Frank Good is City Audr.

FLORENCE, S. C.—Bonds for $30,000 have been sold to be used for water-works improvements.

Bids are asked until April 15 for constructing seven miles of water mains. Estimated cost, $30,000. M. D. Lucas is City Secy. and Treas.

ATLANTA, GA.—The committee from the Water Board and the Bond Commission on March 14 awarded contract to the U. S. CAST IRON PIPE & FOUNDRY CO., of Chattanooga, Tenn., for 13,788 tons of pipe, including 60-in., 36-in., 20-in., and 16-in. mains, and 12, 10, 8 and 6-in. service pipe, a total of 237,652 ft. of pipe, at $20.56 a ton, or $283,481.

On March 14, a subcommittee on new filters reported that a new plant of 8,000,000 gallons capacity will be installed at once, and it was instructed to procure bids.

SAVANNAH, GA.—Bids will be received by the Committee on Water, H. E. Wilson, Chn., until March 30, for furnishing a 150-HP. boiler for the water-works. H. S. Jaudon is Consulting Engr.

MILTON, FLA.—See item under Light and Power Plants.

LAKELAND, FLA.—See item under Light and Power Plants.

LAFAYETTE, ALA.—The citizens have decided to install a system of water-works. Estimated cost, $40,000.

OPELIKA, ALA.—The Mayor has engaged J. B. McCrary, of Atlanta, Ga., to prepare plans for water-works construction. Bids are asked until April 15 for furnishing the city with water and electric lights.

HOUMA, ALA.—The Board of Aldermen has authorized Calvin Wurzlow, Mayor, to ask for bids on the pump to be installed in power-house, which will increase the efficiency of the water-works and make it duplicate system throughout.

LAKELAND, KY.—The State Senate has passed the bill appropriating $90,000 for the Lakeland Insane Asylum, of which $65,000 is to be used for a pure water supply for the institution.

CLIFTON (Newport post-office), KY.—Hill & Co., Engrs., First National Bank Bldg., Cincinnati, Ohio, may be addressed for information relative to the construction of water-works. Estimated cost, $12,000. Construction will include mains, fire plugs, stand-pipe, etc., the water to be supplied from Newport.

YOUNGSTOWN, OHIO.—The Hartford Water Co., of Youngstown, was incorporated on March 11 for $10,000 by Jacob Stambaugh, French Clingan, G. M. Booth, G. F. Hammond and J. A. Hambleton. It will put in a stone crushing apparatus and will build a storage reservoir, to supply water for the plant and for other purposes.

Bids are asked until noon, March 28, by the Director of Public Service, for 125 or less valves, 515 tons or less of c.-i. water pipe and specials, 200 or less valve boxes, and 20 tons or less of pig lead. W. H. McMillen is Clk.

ELYRIA, OHIO.—The Board of Control has voted to issue $25,000 of bonds for the extensions to the water service.

ALLIANCE, OHIO.—Bids are asked by the Director of Public Service until noon, March 26, for furnishing c.-i. water pipe and specials for extending the service mains of the water-works system. J. F. Hogan is Clk.

PERU, IND.—Smith, Hinchman & Grylls, Archs. and Engrs., Washington Arcade Bldg., Detroit, Mich., have been elected to make plans and specifications for the installation of new machinery and other changes in the city lighting and water-works system. T. E. Dunn is City Clk.

BLOOMINGTON, IND.—The Trustees of Indiana University have approved plans for a new water plant. The plans call for two pumping stations and three miles of pipe line from the Grifty Creek Springs. Bids will be asked soon.

SUMMIT, ILL.—Bids will be received until March 28 by the President of Board Village Trustees for erecting a brick pump-house and installing a deep well pump, to be operated with an electric motor; also all pipe connections, electric wiring, etc. W. B. Ewing is Engr., 1003 Chamber of Commerce, Chicago. James Johnstone is Village Clk.

BLACK RIVER FALLS, WIS.—Bids are asked until 8 p. m., March 29, by the Light, Water and Power Committee for laying and constructing a water main a distance of 4,000 ft.

SIOUX CITY, IOWA.—Bids were opened on March 12 for laying 9,600 ft. of 24-in. water main. The lowest bid was that of Lewis & Leeder, at 70 cts. per lin. ft. Estimated cost, $7,195.

RED LAKE FALLS, MINN.—Bids are asked by the City Council for a franchise for constructing water-works and a sewer system. Joseph Perrault is City Clk.

MINNEAPOLIS, MINN.—Bids are asked until March 25 by the city for furnishing 2,000 ⅝-in. corporation cocks complete. Henry N. Knott is City Clk.

SCANDIA, KAN.—The citizens on March 7 voted to issue $21,000 of bonds for the construction of water-works. The J. S. Worley Co., of Kansas City, Mo., Engr.

WAKEFIELD, KAN.—Bids will be received by W. D. Starling, City Clk., until March 25, for constructing water-works. Separate bids will be received as follows: Furnishing and erecting steel tower and tank of 30,000 gallons capacity, on a tower 100 ft. high; a 25-HP. internal combustion engine; furnishing f. o. b. cars Wakefield a vertical triplex deep-well type pump, having a nominal capacity of 200 gallons per minute. Burns & McDonnell are Engrs., Scarritt Bldg., Kansas City, Mo.

STAFFORD, KAN.—See item under Light and Power Plants.

HURON, S. DAK.—Bids were opened on March 4 by the City Council for furnishing and laying c.-i. water mains, requiring in all 15,712 lin. ft. of from 4 to 10-in. pipe, 20,000 lbs. special castings, 15 new 5-in. fire hydrant, from plans of L. P. Wolff, St. Paul, Minn. Contract has been awarded to L. W. SCHRUTH, of Fargo, N. Dak., at $20,200.

WYNCOTE, WYO.—The Secretary of the Interior has authorized the Reclamation Service to construct structures of various types at numerous places along laterals under the North Platte irrigation project, Nebraska-Wyoming. The structures consist of concrete drops, turnout gates, bridge piers, culverts, flumes, etc., and it is estimated that the total cost will be about $40,000.

COKEVILLE, WYO.—Bids will be received until about April 15 for the construction of the Covey Canal, near Cokeville. Approximate quantities: Excavation, earth, 75,000 cu. yds.; loose and solid rock, 2,000 cu. yds. Information can be obtained from W. Newbrough, C. E., Ch. Engr., Evanston, Wyo., or from S. M. Covey, 933 E. First South St., Salt Lake City, Utah.

PEARSALL, TEX.—See item under Light and Power Plants.

SHERMAN, TEX.—Bids are asked by the city until April 4 for the improvement and extension of the water-works. Estimated cost, $12,000. P. C. Thurmond is City Engr.

CHILDRESS, TEX.—The city has engaged John B. Hawley, Fort Worth, Tex., as engineer for water-works improvements, including pumping station at Lake Childress and laying 10,000 ft. of 8-in. water piping. Estimated cost, $12,500.

FORT CROCKETT (Galveston post-office), TEX.—Bids were opened by Capt. P. Whitworth, Q. M., U. S. A., on March 7 for the installation of a water system at this post, as follows: Newport Contracting & Engineering Co., Newport News, Va., $7,800; Trueheart & Jackson, San Antonio, $7,999; Collins Bros., Houston, Tex., $8,423; John C. Underwood, Galveston, $10,230; Galveston Gas Fitting & Plumbing Co., Galveston, $7,728; Heffron & Falligant, Galveston, $7,857; Kelso & Vautrin, Galveston, $5,900.

MEDFORD, OKLA.—The city has voted $12,000 of bonds for the extension of the water-works.

TULSA, OKLA.—The city has voted $100,000 of bonds for improving, extending and maintaining the water-works system. B. H. Sands is Supt.

SAPULPA, OKLA.—Bids will be received until March 28 by Ira J. Anderson, City Clk., for $250,000 of water-works bonds.

FORT COLLINS, COLO.—Bids will be received until April 14 by Robert S. Fedder, City Clk., for constructing a storage reservoir on Bingham Hill, six miles from here. Capacity of the reservoir is to be 5,000,000 U. S. gallons and will have concrete sides and bottom and either concrete or frame roof.

*CANON CITY, COLO.—Contract has been awarded to the KENEFICK-QUIGLEY-HOFFMAN CONSTRUCTION CO., Denver, Colo., for constructing the complete system of irrigation for the Colorado Southern Irrigation Co., which will aggregate in cost approximately $12,000,000. The work is located in the vicinity of Canon City, and consists in part of 8,000,000 cu. yds. of earth in dams; 7,000,000 cu. yds. earth, loose and solid rock in canals; 6,000 lin. ft. tunnel; 250,000 cu. yds. concrete in dams and canals; 1,250,000 lin. ft. sheet and bearing piles, and other items in connection therewith in like proportion. The company intends to sublet this work to responsible contractors as rapidly as it can be staked out by the engineers. On April 5 it will let at the office in Canon City all of the work which the engineers then have ready, aggregating approximately $2,000,000, and including grading, tunnels, masonry and other work. Full information, profiles and plans can be obtained at the office in Canon City after March 25, and arrangements will be made to have contractors shown over the work. No bids will be received, but contractors will be selected from those wanting work and prices will be agreed upon for the particular piece of work he may want.

FORT BAYARD, N. MEX.—Bids are asked until 11 a. m., April 12, by Capt. S. P. Vestal, Constructing Q. M., U. S. A., for complete construction of post water main, with installation of fire plug.

TACOMA, WASH.—BERTELSON & SONS have secured the contract, it is reported, for laying water mains in Canal, River and 21st Sts., at $23,800.

TOWNSEND, WASH.—Contract for the construction of reservoir No. 2, on Morgan Hill, has been awarded to COYNE & SON, at $12,482, the work to be completed five months after commenced.

HOOD RIVER, ORE.—Bonds for $90,000 have been sold, for the construction of water-works to include 5½ miles of wood pipe, concrete head-works basin, storage reservoir in city, and ten miles of pipe in streets.

PORTLAND, ORE.—Bids will be received by the Water Board until 4 p. m., April 1, for furnishing and delivering f. o. b. cars Portland the following materials, separately or collectively: Sleeves and valves—50 6-in. by 6-in., 50 10-in. by 6-in., ten 10-in. by 6-in.; ten 12-in. by 4-in.; cast-iron gate boxes; 500 c.-i. boxes for gate valves; special castings: 70,000 lbs. c.-i. special castings, more or less for water mains of 10-in. or smaller in diameter.

*PORTLAND, ORE.—Bids were received as follows by the Water Board, Frank T. Dodge, Supt., on March 8, for furnishing material and constructing steel conduit from headworks to Mt. Tabor (Bull Run Conduit No. 2), a total aproximate distance of 24 miles, and consisting of 52,915 lin. ft. of 52-in. and 75,379 lin. ft. of 44-in. steel pipe and specials. SCHAW BATCHER CO. PIPE WORKS, Sacramento, Cal., $1,259,782 (awarded contract); Grant, Smith & Co., Spokane, Wash., $1,297,105; Buehner Co., Portland, Ore., (lock bar pipe), $1,321,789; Pacific Construction Co., 16 California St., San Francisco (lock bar pipe), $1,322,628; James Black Masonry & Construction Co., Seattle, Wash., and Wright Bldg., St. Louis, Mo., (lock bar or riveted pipe), $1,376,032; Joseph Paquet & Co., Portland, (lock bar pipe), $1,423,009; Puget Sound Bridge & Dredging Co., 95 Yesler Way, Seattle, Wash., $1,441,859; Joseph Paquet & Co., Portland, $1,480,667; International Contract Co., New York Block, Seattle, Wash., $1,673,195. D. D. Clarke is Engr. Water Bd.

SACRAMENTO, CAL.—The East Sacramento Water Co. has adopted plans and specifications for the construction of a concrete tank of 90,000 gallons capacity.

LOS ANGELES, CAL.—Bids will be received until March 28 by the Board of Water Commissioners for furnishing 2,079 tons standard bell and spigot and 23 tons hub and flange and c.-i. water pipe.

MINIDOKA, IDAHO.—The Secretary of the Interior has approved a contract executed by Charles H. Paul, Project Engr. on the Minidoka project, Idaho, on behalf of the United States with the town of Heyburn providing for the furnishing of a water supply to the town from the Government irrigation system. The length of season during which water is to be furnished is from April 15 to Oct. 15. Under the terms of the contract the town agrees to pay to the Reclamation Service $1.50 per acre ft.

*FORT ERIE, ONT.—Bids will be received by the Reeve and Council until 8 p. m., March 30, for furnishing the materials and constructing a system of water-works for the village. There will be required approximately the following materials: 7.79 miles of 10, 8, 6 and 4-in. c.-i. pipe; 80 fire hydrants; 62 gate valves; two combination gas and gasoline engines, or two motors and two triplex power pumps; brick pumping station, stand-pipe, etc. Witmer & Brown are Engrs., Fort Erie.

WESTON, ONT.—Bids are asked until 8 p. m., April 18, by T. H. Taylor, Clk., for Contract B, pump house; Contract F, mechanical water filters; Contract G, electrically operated machinery. Willis Chipman, C. E., is Ch. Engr., 204 Mail Bldg., Toronto, Ont.

HAMILTON, ONT.—The city will build new water mains. Estimated cost, $100,000. A. F. McCaullum is City Engr. and Mgr. W.-Wks.

CALGARY, ALTA.—Bids will be received until noon, May 1, by J. S. Dennis, Asst. to 2nd Vice-President Canadian Pacific Ry. Co., Calgary, for all excavation required to complete the canal system in the eastern section of the company's irrigation block in Alberta, amounting to about 25,000,000 cu. yds. of material.

Bids are asked until noon, April 1, by J. S. Dennis, Asst. to 2nd Vice-President, Canadian Pacific Ry. Co., Calgary, for labor required to complete the timber construction in the western section of the irrigation block, Alberta, amounting to about 1,250,000 ft. B.M.

NORTH BATTLEFORD, SASK.—Bids are asked until 8 p. m., April 19, by the city, for Contract A, pipe laying, water-works and sewers; Contract D, c.-i. water pipes; Contract E, fire hydrants, valves, etc.; Contract L, concrete reservoir; Contract X, sewage disposal works. Plans and specifications may be seen at the office of the Chief Engineer, Winnipeg and Toronto, and at the Town Hall, North Battleford. J. A. Foley is Mayor. Willis Chipman, C. E., is Ch. Engr.

SEWERAGE.

NEW BRITAIN, CONN.—Contract for furnishing the city with sewer pipe for the coming fiscal year has been awarded, it is reported, to the WARNER-MILLER CO., of New Haven, at about $15,000.

WESTPORT, CONN.—The Fire District on March 10 appropriated $15,000 for the construction of a sewerage system.

ALBANY, N. Y.—The following bids were received by the Board of Contract and Supply, Albany, on March 21, for the construction of concrete sewer through the "sunken meadows" north of Western Ave.: John M. Holler, Albany, $19,246; Kennedy & Easton Construction Co., Albany, $22,470; John Doyle, Albany, $15,418; Bruno & Pettiti, Boston, Mass., $28,026; T. Henry Dumary, Albany, $15,862; Michael F. Dollard, Albany, $21,315; James H. Malcolm, Albany, $20,612. Walter Melius is City Engr. John Doyle is also the lowest bidder for the work of constructing vitrified pipe sewers in Manning Boulevard, Myrtle Ave. and Putnam St. Itemized prices will be given next week.

BROOKLYN, N. Y.—Bids are asked until 11 a. m., March 30, by Alfred E. Steers, Pres. Boro., for furnishing and delivering various supplies to the Bureau of Sewers.

BROOKLYN, N. Y.—Bids are asked by Alfred E. Steers, Boro. Pres., until 11 a. m., April 6, for labor and materials for the construction of sewers and sewer basins in various streets.

*MONTICELLO, N. Y.—We are officially advised that bids were received as follows on March 17 by the Sewer Commissioners for construction of a portion of the system of sewers and a sewage disposal plant: (a) sewers, (b) disposal plant and diverting stream, (c) total: L. F. Bannon Co., Kingston, N. Y., (a) $88,315, (b) $27,777, (c) $116,092; Rider Construction Co., Monticello, (a) $78,000, (b) $20,000, (c) $98,000; C. S. LAMBIE CO., Wabash Bldg., Pittsburg, Pa., (a) $66,300, (b) $26,600, (c) $92,900 (awarded contract); John W. Heller, 738 Broad St., Newark, N. J., (a) $68,654, (b) $30,058, (c) $98,712; Albert M. Banker, Gloversville, N. Y., (a) $86,000, (b) $28,000, (c) $114,000; The Kellum & Shaffer Co., Schenectady, N. Y., (a) $88,300, (b) $34,300, (c) $122,600; Joseph B. O'Rourke & Co., 83 Journal Bldg., Boston, Mass., (a) $82,712, (b) $29,400, (c) $112,112; Delaware Construction Co., Sidney, N. Y., (a) $88,000, (b) $28,000, (c) $116,000; Albert Gaffey, Syracuse, N. Y., (a) $92,827, (b) $23,944, (c) $116,771; Charles Ippolito, (a) $75,640, (b) $24,680, (c) $100,320. G. N. Bell, Engr., Kingston.

PATERSON, N. J.—The Board of Public Works on March 15 passed a resolution to advertise the intention of the city to construct a sewer extending from Market St. and Vreeland Ave. to East 35th St., which will drain Vernon, Buffalo and Trenton Aves. Plans for the sewer have been drawn by John J. Harder, City Engr. Estimated cost, $137,000.

HARRISBURG, PA.—Bids are asked by the City Highway Department until noon, March 26, for the construction of sewers in several highways. W. W. Caldwell is Comr.

ARNOLD, PA.—Bids are asked until 7 p. m., April 6, by the boroughs of Arnold and New Kensington for the construction of a 48-in. steel reinforced-concrete sewer in 14th St., Arnold. Length of sewer, about 2,000 ft. George B. Campbell, Jr., is Boro. Engr.

JUNIATA, PA.—Bids are asked until 8 p. m., March 29, by the Highways Committee for the construction of a clay pipe sewer in Fourth Ave., from Eighth St. to 18th St., inclusive, with necessary Y branches. W. H. Baird is Boro. Clk.

CHARLESTON, S. C.—P. D. HAY, of Charleston, has received contract at about $29,000 for additional drain work at Charleston navy yard. Noted on Feb. 24.

COLUMBIA, S. C.—The Granby Cotton Mills is having plans prepared for a sewer system in mill village. About 7,000 ft. of sewerage will be laid; probably mainly by the company.

MILTON, FLA.—See item under Light and Power Plants.

KISSIMMEE, FLA.—The city has voted $43,000 of sewer and water-works bonds. Xavier A. Kramer is Engr., Magnolia, Miss.

PHENIX CITY (Columbus, Ga., post-office), ALA.—The city will lay 600 ft. of sewer pipe across the street at the foot of Summerville hill and fill in the street. Wiley Rusk is Chn. Street Com.

MONTGOMERY, ALA.—The Western Ry. of Alabama, C. A. Wickersham, Pres., Atlanta, Ga., has decided to construct jointly with the city a concrete sewer and also fill in the ravine in place of the iron bridge now on N. Court St. Gaston Gunter is Mayor.

COLUMBIA, TENN.—The City Council is considering the construction of Helm's Branch sanitary sewer. Estimated cost, $10,000.

MORRISTOWN, TENN.—The city has engaged Charles E. Collins, Drexel Bldg., Philadelphia, Pa., as engineer for sewer system. Surveys are now being made.

*MOUNT STERLING, KY.—We are officially advised that bids were received as follows on March 1 by the City Clerk for furnishing all materials and laying complete about 9½ miles of sewers, varying in size from 6 to 24-in. in diameter, together with all manholes, lampholes, flush tanks, etc.; also reinforced-concrete septic tank. John B. McClain & Co., Newport, Ky., $45,962; Fernow & Brown, Montclair, N. J., $48,521; H. S. Bosler, Chattanooga, Tenn., $47,393; Scott & Walker, Cincinnati, Ohio, $46,780; H. K. Bell, Lexington, Ky., $45,810; T. S. Scanlon, Huntington, W. Va., $45,959; E. C. McConnel, Kenton, Ohio, $45,247; C. E. Harris, Covington, Ky., $42,870; C. C. Miller & Co., Covington, $46,765; A. J. Waldrip, Knoxville, Tenn., $52,749; Noll Construction Co., Chattanooga, $44,746; L. W. Hancock & Co., Louisville, Ky., $78,028; Kelley Bros., Portsmouth, Ohio, $49,477; James Ferry & Sons, Pittsburg, Pa., $49,161; Clark Construction Co., Winchester, Ky., $45,157; Paul & Kershner, Dayton, Ohio, $44,995; Louis Des Cognets & Co., Lexington, $6,599 (bid on septic tanks only). Charles E. Collins is Engr., 321 Drexel Bldg., Philadelphia, Pa.

LOUISVILLE, KY.—Bids will be received by the Commissioners of Sewerage until April 1 for Contract 63, Sect. A of Frankfort Ave. sewer, and Contract 64, the Third St. sewer, and until April 8 for Contract 62, Brook St. sewer. J. B. F. Breed is Ch. Engr. Harrison P. Eddy is Consulting Engr., 14 Beacon St., Boston, Mass.

PLEASANT RIDGE, OHIO.—We are officially advised that the City Council on March 16 accepted and adopted the surveys, maps, plans, designs and estimates of Donald W. Caven, Engr., Pleasant Ridge, for a sewerage system and disposal plant. Estimated cost, approximately $227,000. About 15 miles of vitrified pipe sewers will be required.

ELKHART, IND.—Bids will be received by the Board of Public Works until March 26 for constructing sewers in Jackson, Vine and Fulton Sts.

MICHIGAN CITY, IND.—Bids will be received until March 29 by the city for constructing a reinforced-concrete sewer in Willard Ave. Estimated cost, about $40,000, and for a vitrified pipe sewer in Tryon St., to cost $6,000. H. M. Miles is City Engr.

VINCENNES, IND.—The City Council has contracted for plans for a complete system of sewerage for Vincennes. Bids will be asked as soon as plans are completed.

GREENFIELD, IND.—The County Commissioners have let the contract for a sewer system and light plant for the County Infirmary to the CLARK LIGHTING CO. and J. W. FRY, contractor.

ELKHART, IND.—Bids are asked until March 26 by the Board of Public Works for the construction of a sewer in Jackson St., Vine St. and Fulton St.

DANVILLE, ILL.—Bids will be received until May 1 by the city for the construction of sewers in Fairweight Park and Elmwood Park additions. Estimated cost, about $70,000. W. E. Winn is City Engr.

GLENELLYN, ILL.—The Aetna Engineering Bureau, Consulting Engr., 125 La Salle St., Chicago, Ill., has completed plans for a sewer system and disposal plant. Estimated cost, $100,000.

AURORA, ILL.—Bids are asked until 5 p. m., March 30, at the office of the Building and Sewer Inspector for 14 tons of castings for the Sewer Department.

METROPOLIS, ILL.—The Board of Local Improvements on March 7 awarded contract for the construction of the sewer in Sewer District No. 1 to REEB BROS., of Belleville, Ill. There were four other bids. The bids were as follows: Reeb Bros., $57,659; E. R. Harding, Racine, Wis., $59,639; G. W. Katterjohn, Paducah, Ky., $60,080; J. B. & B. S. Craine, Murphysboro, Ill., $61,253; J. Ferry & Son, Pittsburg, Pa., $67,953.

BELOIT, WIS.—Bids are asked until 2 p. m., March 30, by the Board of Public Works for constructing sanitary sewers in various streets, about 13,000 ft. of 8, 10 and 12-in. pipe, 30 manholes, and one flush tank. Plans at office of Robert Caldwell, City Engr., Merchants Loan & Trust Bldg., Chicago, Ill.

MUSCATINE, IOWA.—The City Council on March 10 awarded contracts as follows: For Kecklerville sewer, to the INDEPENDENT CONSTRUCTION CO., of Davenport, Iowa, at $5,873; for Fair Oaks sewer, to the EPPEL-SCHLOSSER CO., of Muscatine, at $3,398. James J. Ryan is City Engr.

RED LAKE FALLS, MINN.—See item under Water Supply—Irrigation.

PEABODY, KAN.—Bids will be received by the City Clerk until 7.30 p. m., April 5, for furnishing material and constructing four miles of sanitary sewers, 8 to 12 ins. diameter, with manholes, flush tanks, etc.; also a reinforced-concrete septic tank. J. W. Mavity, of Lyndon, Kan., is Engr.

LEAVENWORTH, KAN.—Plans have been approved for the construction of a trunk sewer in District 9 in the southwestern part of the city. Estimated cost, $21,000.

FARGO, N. DAK.—Bids are asked until 5 p. m., April 28, by N. C. Morgan, City Audr., for the construction of a 12-in. sewer in 13th St. North.

RUSSELLVILLE, ARK.—We are officially advised that a sanitary sewer system, including septic tank, will be installed this season. Fuller-Coult Co., are Engrs., Chemical Bldg., St. Louis, Mo.

PINE BLUFF, ARK.—The city has awarded contract to ROBINSON BROS., of Pine Bluff, for the extension of sewers in District 8, sewers to be constructed in Mulberry St. and 18th, 19th and 20th Aves.

OKLAHOMA CITY, OKLA.—Bids are asked until March 28 by the city for sewage purification works, and for lateral sewer in Riley's Meadow Garden Addition. Estimated cost, $25,000. Bob Parman is City Clk.

TULSA, OKLA.—The city has [illegible]ed $35,000 of bonds for the extension [illegible] sanitary sewer mains and submains and [illegible]rm sewers. John O. Mitchell is Mayor.

MUSKOGEE, OKLA.—Bids are [illegible]ed until 5 p. m., March 28, by Charles W[illegible]ler, Jr., City Clk., for the construction [illegible] various sanitary district sewers.

GREELEY, COLO.—Contract [illegible] sewer work in District 45, bids opened March 8, has been awarded to SPICER [illegible] WATTSON, of Colorado Springs, at $1[illegible].

OROVILLE, CAL.—A prelimin[illegible] report has been submitted to the City [illegible]ncil for the proposed sewer system. Esti[illegible]ed cost, $120,000. B. L. McCoy is City E[illegible].

MAYFIELD, CAL.—The Town T[illegible]tees on March 7 awarded contract to B[illegible]ETT & SONNICKSON for the constructi[illegible] of the sewer system, at $21,785.

TORONTO, ONT.—Bids are a[illegible]ed until noon, April 4, by the Industrial [illegible]ool Association of Toronto for the constr[illegible]ion and completion of a pipe sewer and [illegible] appurtenances, from a point on the premi[illegible] of the Victoria Industrial School, Mimi[illegible] to the head of Seventh St., New Toronto, [illegible] there connect with the New Toronto sew[illegible] system. Plans and specifications may be [illegible] and forms of proposal and full inform[illegible]on obtained at the office of Chester Ferr[illegible], Supt., or at the office of J. A. L. M[illegible]pherson, Engr. in Charge, Islington.

GARBAGE DISPOSAL.

(* *denotes that this work is advertised in Engineering News.*)

BOSTON, MASS.—Bids will be received until May 15 by Guy C. Emerson, Supt. Streets, for furnishing watering carts and also watering and oiling the streets in the following districts: No. 1, South Boston; No. 2, East Boston and Breed's Island; No. 3, Charlestown; No. 4, Brighton; No. 5, West Roxbury; Nos. 6-9, Dorchester and Ashmont; No. 7, Roxbury S. and Jamaica Plain; No. 8 South End, Roxbury, N.; No. 10, North and West Ends and Back Bay; from time to time as may be needed between April 1, 1910, and Dec. 1, 1910.

PITTSFIELD, MASS.—The Aldermen on March 7 awarded contract to ZAHN BROS., of Peck's Road, for collecting garbage and caring for the public dump for a period of five years at $79,500.

WEST POINT, N. Y.—Bids are asked by the Quartermaster, U. S. A., West Point, until noon, April 15, for the construction of a crematory building and garbage crematory complete, at West Point.

JERSEY CITY, N. J.—Bids are asked by the Street and Water Board until March 25 for the removal of garbage and ashes for the balance of the fiscal year ending Nov. 30 next.

*ATLANTA, GA.—Bids will be received by the Board of Health until 5 p. m., April 29, for the construction of a crematory capable of destroying 200 tons of garbage in twelve hours. Address G. H. Brandon, Secy., 101 Marietta St., Atlanta, for additional information and for specifications. At the same time and place bids will be received for the construction of two crematories capable of destroying 100 tons of garbage each in twelve hours.

INDIANAPOLIS, IND.—Bids are asked until March 25 by the Board of Public Works for sprinkling unimproved streets of the city and also certain sections of improved streets between the tracks of the Indianapolis Traction & Terminal Co.

SAN BERNARDINO, CAL.—JAMES McNAIR has been awarded contract for garbage disposal for three years. He will construct an incinerator and provide air-tight wagons.

STREETS AND ROADS.

(* *denotes that this work is advertised in Engineering News.*)

HARTFORD, CONN.—Bids will be received until 2 p. m., March 28, at the office of the State Highway Commissioner, Capitol, Hartford, as follows for state road work: Town of Haddam—Eight sections of graded road on the Hartford-Saybrook Turnpike, aggregating 2¼ miles; one 30-in., four 15-in., one 24-in., two 12-in. and two 18-in. tile culverts required. Plans and specifications with E. P. Arnold, First Selectman. Town of Hartland—3,750 lin. ft gravel road on the Hartland-Hollow Highway; two 20-in., one 18-in. and three 15-in. tile culverts required. Plans and specifications with W. S. Miller, First Selectman. Town of Torrington—21,330 lin. ft. gravel road on the Torrington-Norfolk Turnpike; seven 20-in., four 15-in., two 30-in., ten 24-in., one 12-in. and two 18-in. tile culverts required. Plans and specifications with G. E. Cook, First Selectman. Town of Prospect—2,104 lin. ft. on the Union City road; one 15-in. and two 24-in. tile culverts required. Plans and specifications with C. P. Wallace, First Selectman. Town of Woodbury—5,965 lin. ft. grading on the Newtown Road; three 24-in., three 12-in., seven 15-in. and two 30-in. tile culverts required; 3,550 lin. ft. gravel on the Roxbury Road; one 15-in. tile and a concrete arch culvert required; 2,115 lin. ft. gravel on the Sherman Hill Road; two 20-in. and one 24-in. tile culverts required. Plans and specifications with C. S. Curtiss, First Selectman. Borough of Naugatuck—596 lin. ft. gravel on the Union City Road. Plans and specifications with L. S. Bearsley, Boro. Clerk, Naugatuck.

The budget of the City Street Department, as approved by the Court of Common Council, for 1910, contains the following appropriations for the work specified: Road making and repairs—grading and turnpiking, $16,151; macadamizing, $24,077; resurfacing and repairs, $47,000. Improved paving and repairs—General repairs, $13,000; Capitol Ave., $13,330; Farmington Ave., $5,100; Main St., $14,830; Bridge repairs, $4,000; cross and sidewalks, $9,650; culverts and inlets, $11,000; street lighting, $65,000; street cleaning, $57,200; steam roller repairs, $2,000; merestones, $[illegible].

HARTFORD, CONN.—Plans for proposed road work have been received by the State Highway Commissioner, James H. MacDonald, as follows: From Buck & Sheldon, Engrs., 1,200 lin. ft. on Roast Meat Hill and 11,400 lin. ft. on the Killingworth Turnpike in the town of Killingworth; from A. B. Alderson, Engr., 28,250 lin. ft. on the Hartford-Winsted Turnpike in the town of Canton.

NEW YORK, N. Y.—Bids are asked by Alfred E. Steers, Pres. Boro. of Brooklyn, until 11 a. m., March 30, for supplying broken rock and sand, and for paving and constructing sidewalks.

Bids are asked until 3 p. m., March 24, by the Park Board for furnishing and delivering three gasoline motor road rollers for parks and parkways, Boro. of Manhattan, and for repairs and alterations to seven steam rollers.

We are officially advised that COOPER & EVANS CO., 220 Broadway, New York, have been awarded the following city contracts: Constructing Colonial Park and regulating, grading, etc., East 76th St., Boro. of Manhattan; regulating, grading, etc., South Washington Pl., Crescent St. and Eleventh Ave., Boro. of Queens.

TROY, N. Y.—Bids will be received by the Board of Contract and Supply until March 25 for furnishing material, grading, curbing, paving and regulating South St. James M. Riley is Secy.

AMSTERDAM, N. Y.—Bids will be received until April 5 by J. E. Crane, City Engr., for furnishing material and paving 4,500 sq. yds. with fireclay brick on East Main St. and 3,600 sq. yds. on Spring St.

ATLANTIC CITY, N. J.—The City Council on March 14 awarded a $12,480 contract to the NELSON MEREDITH CO. to widen the Boardwalk between Illinois and Arkansas Aves. The other bidders were B. F. Sweeten & Son, United Paving Co., Filbert Construction Co. and Wilbert Beaumont.

ELIZABETH, N. J.—The City Council received bids on March 15 for paving Florida St. with 6,340 sq. yds. of brick pavement on a 6-in. concrete foundation. J. J. Potts, of Elizabeth, bid $14,237.

PHILADELPHIA, PA.—The Board of Public Works has transmitted to the City Council a letter from George R. Stearns, Dir. of Public Works, relative to the probable cost of repaving all streets within central business district between Delaware and Schuylkill Rivers and Vine and South Sts. with wood block. Mr. Stearns estimates the entire cost at $3,500,000, as follows: Paving area of main streets in this district, 769,610 sq. yds.; estimated cost of repaving these streets, with wood block on a 6-in. cement concrete foundation, including cost of curbing and reconstruction of inlets, $2,900,000; estimated cost of repaving with wood block the minor streets within this territory, $600,000.

SCRANTON, PA.—William Shunk, Ch. of the Bureau of Engineering, has completed plans for four miles of paved streets to be constructed in this city during the year, or as soon as the work can be done. The estimated cost of the improvement, which embraces every part of the city, is $591,682. Plans have been prepared for a number of relief sewers.

NORFOLK, VA.—F. J. McGUIRE was awarded the contract on March 15 by the Board of Control for furnishing material and laying combined concrete curb and gutters in the Greater Ghent section, his bid being $12,481. The bids are on a basis of 26,000 ft. of straight curb and 870 ft. of corners.

ATLANTA, GA.—Bids are asked by the Mayor and General Council at the City Clerk's office until 3 p. m., April 4, for paving North Boulevard from Ponce de Leon Ave. to North Ave., with creosoted wooden blocks, approximately 3,500 sq. yds. J. P. Foster is City Clerk; R. M. Clayton is City Engr.

LOUISVILLE, KY.—The Board of Public Works has received bids for the reconstruction of 14 streets. The paving is to be done with vitrified brick and the cost is estimated at about $70,000. Of the bids received those of Henry Bickel, 1048 Garden St., prices ranged from $1.90 to $1.95 for Peebles block vitrified brick. The Staebler Co. made proposals on Portsmouth granite at prices from $1.87 to $2.05. G. W. Gosnell's bid was on Carlisle block, a brand of vitrified brick, and the price was $1.85. L. R. Figg & Co., 243 Sixth St., bid $1.88 on Carlisle block. No awards have been made and probably it will be two weeks before they are announced.

CLEVELAND HEIGHTS (Cleveland post-office), OHIO.—Bids will be received by H. H. Canfield, Clerk of the village of Cleveland Heights, at his residence on Norfolk Road, in said village, or at his office at 309 Beckman Bldg., Cleveland, Ohio, until noon, April 5, for furnishing the material and labor necessary to treat with oil for the purpose of laying the dust on and preserving the surface of Cedar Road, from Overlook Road to Coventry Road; Bellfield Ave., from Cedar Road to Shaker Parkway; Grandview Ave., from Cedar Road to Shaker Parkway; Coventry Road, from Mayfield Road to Shaker Parkway; Fairmount Boulevard, from Coventry Road to Shaker Parkway; Stratford Road, from Fairmount Boulevard to Fairfax Road; Guilford Road, from Fairmount Boulevard to Monmouth Road; Lee Road, from Fairmount Boulevard to South Woodland Road; Mayfield Road, from the westerly limits of said village to the easterly limits of said village; Hampshire Road, from Coventry Road to Superior St.; Cadwell Ave., from Euclid Heights Boulevard to Hampshire Road; Euclid Heights Boulevard, from Coventry Road to Superior St.; Lee Road, from Mayfield Road to Superior St., according to the plans and specifications on file at the office of The F. A. Pease Engineering Co., 931 Williamson Bldg., Cleveland, Ohio.

COLUMBUS, OHIO.—The city of Columbus will proceed with the proposed improvement of a number of streets. The streets to be improved are: Norwich Ave., from Neil Ave. to a point opposite lot No. 19; Noble St., from Fifth St. to Washington Ave.; the alley north of Bryden Road, from Parsons Ave. to 18th St.; 21st St., from Rich St. to Bryden Road; Engler St., from Fourth St. to Seventh St.; Studer Ave., from Columbus St. to Schiller St.; Germania St., from Jaeger St. to Parsons Ave.; Schiller St., from 17th St. to Lockbourne Road; Jaeger St., from Deshler Ave. to Hanford St. The construction of a number of sewers also has been authorized by the City Council. Henry Maetzel is City Engr.

CINCINNATI, OHIO.—Bids will be received until April 8 by the Board of County Commissioners for repair of south fork of Taylor Creek Road, Green and Miami Townships, as per Specification No. 13. F. Driehs is Clerk.

The Director of Public Service, acting upon the opinion of the City Solicitor, has rejected all bids for the Reading Road wood block paving contracts, and has instructed John Wenner, Clerk, to advertise for new bids and new oil samples. The lowest of the 14 bids for the work was that of A. J. Henkel & Bro., at $232,323.

YOUNGSTOWN, OHIO.—Bids will be received until March 28 by the County Commissioners at Youngstown for improving by limestone macadam Section 2 of the Boardman East and West Road in Boardman Township, a distance of 8,100 ft. Frank Agnew is Secy.

STEUBENVILLE, OHIO.—Bids are asked by the Director of Public Service until noon, March 28, for paving the first alley east of Seventh St., south of Washington St., and the first alley north of Market St., from Seventh St. to P. C. C. & St. L. Ry., and for repaving Court St., from Market St. to Adams St. R. L. Freudenberger is Clerk; J. N. Leech is City Engr.

GOSHEN, IND.—Bids are asked until March 29 by the Board of Public Works, Goshen, for paving Main St. with vitrified brick on a 6-in. sand foundation.

KOKOMO, IND.—Bids are asked by the Commissioners of Howard County until 2 p. m., April 15, for the construction of a certain free gravel or stone road in Center Township, known as the Dixon Road. A. B. Esterling is County Audr.

VINCENNES, IND.—A survey is being made for four miles of gravel road east of the city. Bids will be received as soon as completed. Joseph V. Hershey is Surv.

MUNCIE, IND.—Bids will be received by the Commissioners of Delaware County until 10 a. m., April 8, for the construction of the McCreery gravel road in Harrison Township. Joseph E. Davis is County Audr.

PETERSBURG, IND.—Bids are asked by the Commissioners of Pike County until April 5 for the construction of Road No. 1, one mile and 3,909 ft. in length and road No. 2, two miles and 215 ft., in Logan Township. Frank A. Bilderback is County Audr.

WILLIAMSPORT, IND.—Bids are asked by the Commisioners of Warren County until 1 p. m., April 8, for the construction of a gravel road in Steuben Township, petitioned for by W. H. Allison et al. Robert L. Winks is County Audr.

FOWLER, IND.—Bids will be received by Commissioners of Benton County until 1 p. m., April 9, for the construction of four gravel or stone roads. Lemuel Shipman is County Audr.

DANVILLE, IND.—The Commissioners of Hendricks County have awarded a contract for the construction of three gravel roads to GEORGE T. MILLER, of Lebanon, Ind., at an aggregate cost of $26,650 and one gravel road to WALTER G. HADLEP, at $9,945.

ELKHART, IND.—Bids will be received by the Board of Public Works for paving West Second St. and Lexington Ave. with either brick, sheet asphalt, asphalt blocks or bitulithic. E. M. Chester is Pres.

COVINGTON, IND.—Bids are asked by William B. Gray, Audr. of Fountain County, until 1.30 p. m., April 5, for the construction of a gravel road in Millcreek Township.

BEDFORD, IND.—Bids are asked by W. G. Owens, Audr. of Lawrence County, until 1 p. m., April 11, for the construction of 6,902 ft. of gravel road in Shawswick Township.

CONNERSVILLE, IND.—Bids will be received until April 14 by the Town Board of East Connersville for the construction of 90,000 sq. ft. of cement sidewalks 5 ft. wide. Carl L. Hanson is Town Engr.

PAOLI, IND.—Bids were received by the Commissioners of Orange County on March 8 for the construction of the following macadamized roads: (a) Road No. 1, Saltilloville road in Northeast Township, 12,379 ft. in length; (b) Road No. 1, New Albany road in French Lick Township, 11,297 ft. in length; Road No. 1, Newton Steward road in Greenfield Township, 9.240 ft. in length; (c) Road No. 2, English road in Greenfield Township, 9,249 ft. in length. A. B. Ham is County Audr. We are officially advised that the following contracts have been let: (a) O. P. JOHNSON, of Orleans, Ind.; (b) W. V. WEATHERS, of Marengo, Ind.; (c) ALFRED M. COLLINS, of Youngs Creek, Ind.

PRINCETON, IND.—The Commissioners of Gibson County will ask for bids soon for the construction of 6½ miles of gravel road in Patoka Township; 2½ miles in Johnson Township; 3 miles in White River Township, and 6½ miles in Montgomery Township.

PEORIA, ILL.—The Board of Local Improvements on March 9 awarded the contract for resurfacing a portion of Seventh St. to GEORGE A. PETEA, of Sycamore, Ill., at $14,887.

PLATTEVILLE, WIS.—Bids will be received until 7.30 p. m., April 14, by P. D. Hendershott, City Clk., for paving Main and Second Sts., requiring 6,560 sq. yds. of brick pavement, 340 lin. ft. curb and gutter, 490 lin. ft. marginal curb, and 320 lin. ft. plain curb. W. G. Kirchoffer is Engr., Madison.

RACINE, WIS.—The following bids were received on March 5 for paving portions of Racine and Eleventh Sts.: H. C. Hanson, $42,571; Theodore B. Wooley, $42,224; Thatcher & Powell, $42,763; P. B. Johnson, $42,482; Jas. Cope & Sons, $42,623; WESTERN IMPROVEMENT CO., Racine, $42,146 (awarded contract); N. T. Reichert, $42,455; E. R. Harding Co., $42,426; R. R. Birdsall, $42,307, and Federal Improvement Co., $43,-155. P. H. Connolly is City Engr.

TWO RIVERS, WIS.—Bids are asked by the Board of Public Works until 7.30 p. m., April 8, for grading, curbing and paving with macadam that part of Washington St. lying between the north line of 22d St. and extending to the north line of 25th St.

ATLANTIC, IOWA.—The City Council has awarded the contract for about 10,455 yds. of brick paving and 12,700 sq. yds. of asphalt paving to the CAPITAL CONCRETE CONSTRUCTION CO., of Springfield, Ill., at $1.97 per sq. yd. for asphalt, and $2.03 per sq. yds. for brick.

MASON CITY, IOWA.—The City Council on March 7 awarded the contract for paving with brick portions of East Miller and South Miller Sts., at $1.90 per sq. yd., and with concrete portions of Adams Ave., Ada and North Main Sts. and alleys in Blocks 24 and 25 at $1.25 and $1.28 per sq. yd., to GEORGE GABLER. Probable cost of improvement, $54,000. F. P. Wilson is City Engr.

AMES, IOWA.—Bids were received on March 15 for about 24,000 sq. yds. of 3-in. creosoted wood block paving, treated with 16 lbs. of creosote oil per cu. ft., laid on 1-in. sand cushion and 4-in. concrete base. A. B. Maxwell, City Clerk; J. Q. Kickham is City Engr. We are officially advised that the contract has been let to WILLIAM HORRABIN, of Iowa City, Iowa, at $2.039 per sq. yd.

EVELETH, MINN.—Bids will be received until April 5 by D. P. McIntyre, City Clerk, for furnishing material and paving Grant Ave. its entire length, requiring about 9,700 sq. yds. of pavement.

MANKATO, MINN.—We are officially advised that the following bids were received on March 14 by the Board of Public Works, J. R. Thompson, Pres., for brick paving on 6-in. concrete, with cement filler, Purington block: J. W. Turner Improvement Co., Des Moines, Iowa, $42,586; North Star Construction Co., Mankato, $46,998; T. R. Coughlan Co., Mankato, $38,651; FIELDING & SHEPLEY, 216 University Ave., St. Paul, Minn., $39,054 (awarded contract).

FORT LEAVENWORTH, KAN.—Bids are asked by Capt. William D. Davis, Q. M., until 11 a. m., April 6, for the construction of concrete walks, curbs and gutters, etc., at Fort Leavenworth, Kan.

OTTAWA, KAN.—The contract for about 38 blocks of macadam pavement with asphalt binder has been awarded to N. E. STUCKER, of Ottawa, at 93 cts. per sq. yd. F. A. Marcell is City Clerk.

GRAND FORKS, N. DAK.—Bids were received on March 12, by the City Council for street improvements. The following contracts have been let: District No. 11—38,000 yds., donnellite, P. McDONNELL, of Duluth, Minn., $81,000; District No. 12—20,000 yds. bitulithic, BITULITHIC CO., $73,355; District No. 13—19,300 yds. granitoid, R. S. BLOME CO., 79 Dearborn St., Chicago, $51,-792; District No. 14—8,700 yds. creosoted blocks, FIELDING & SHEPLEY, 216 University Ave., St. Paul, Minn., $24,895; District No. 16—10,300 yds., bids rejected.

ABERDEEN, S. DAK.—Bids are asked by the City Council, until 8 p. m., April 11, for the paving of the following named streets and avenues in this city: First St., south from Railroad Ave. southwest, to Third Ave. southwest, and First Ave. southwest, from First St. to Second St. south, and Third Ave. southwest, from First St. to Sixth St. south, and Second Ave. southeast, from the east line of Lincoln St. to the east line of Pennsylvania St. F. W. Raymond is City Audr.

ST. LOUIS, MO.—On March 1 the Board of Public Improvements caused seven bills for the improvement of streets to be introduced in the Municipal Assembly. Two of them change the granite pavement to wood blocks at Fourth St. and Washington Ave. Two sections of King's Highway are included. One bill authorizes granite block paving on Walnut St., from Tenth St. to the City Hall. This is one of the few unimproved streets in the downtown district. The streets to be paved follow: Wood blocks—Washington Ave., from King's Highway to Union; Fourth St., from Chestnut to Washington; Washington, from Fourth to Twelfth; Rauschenbach, from Benton to Hebert. Telford—King's Highway, from Gravois to Nottingham, and from Nottingham to Arsenal. Granite—Walnut St., from Tenth to Twelfth.

LITTLE ROCK, ARK.—Bids are asked by the Commissioners of Izard Street Improvement District No. 151, until 10 a. m., March 26, at the office of W. F. Reinhardt, Secy., 102 Louisiana St., Little Rock, for grading Izard St., from 26th St. to 32d St.

OKLAHOMA CITY, OKLA.—We are officially advised that bids were received as follows on March 7, by W. C. Burke, City Engr., for asphalt paving in this city. We are advised that the total amount of the yardage is 262,215 sq. yds., and the total amount of the contract aggregating nearly $860,000, which in length amounts to 15.78 miles. This does not include a double amount for boulevard streets which have a double driveway. Walker Ave., WESTERN PAVING CO., $55,237; 24th, 25th and 26th Sts., WESTERN PAVING CO., $37,555; Summit and Dewey Aves., no bids received (engineer's estimate, $30,373); 27th, 29th and 30th Sts., no bids received (engineer's estimate, $33,328); Young's Boulevard, no bids received (engineer's estimate, $18,055); 24th and 25th Sts., BARBER ASPHALT PAVING CO., Baltimore Bldg., Oklahoma City, $33,993; 31st St., Western Paving Co. bid $10,355 (no award made); Panama, Carroll, Orr, Jameston Sts. and Ellison and Klein Aves., WESTERN PAVING CO., $45,114; Noble Ave., CLEVELAND TRINIDAD PAVING CO., 420 Lakeside Ave., N. E., Cleveland, Ohio, $6,803; Chickasaw Ave., CLEVELAND TRINIDAD PAVING CO., $12,284; Twelfth St., WESTERN PAVING CO., $9,-571; Seventh St., CLEVELAND TRINIDAD PAVING CO., $14,231; Chickasaw Ave., WESTERN PAVING CO., $20,181; Marion Ave. and 15th St., CLEVELAND TRINIDAD PAVING CO., $8,003; 20th St., BARBER ASPHALT PAVING CO., $2,960; Central Ave., CLEVELAND TRINIDAD PAVING CO., $4,612; Harvey and Hudson Aves., WESTERN PAVING CO., $23,093; 23d St., WESTERN PAVING CO., $31,700; Tenth St., BARBER ASPHALT PAVING CO., $46,350; 16th, 17th, 18th, 20th and 21st Sts., no bids received (engineer's estimate, $58,402); Drexel Boulevard, Land and Independence Aves., no bids received (engineer's estimate, $40,596); 20th and 27th Sts., WESTERN PAVING CO., $29,746; Linwood Boulevard, no bids received (engineer's estimate, $264,249.).

ABERDEEN, WASH.—Bids will be received April 6 by P. F. Clark, City Clk., for paving and constructing sidewalks, curbs, and gutters on portions of Market and K Sts., estimated to cost $45,000. Bids to be separate on paving and concrete walks.

SEATTLE, WASH.—Contracts will be let soon for grading and constructing sidewalks on portions of 28th Ave. N. W., West 66th, West 68th, West 71st, West 73d and West 78th Sts. Estimated cost, $51,000. R. H. Thomson is City Engr.

SPOKANE, WASH.—The UNION IRON WORKS, of Spokane, has secured contract for constructing a portion of the asphalt paving plan for $4,000; and HETHERINGTON & BERNER, of Indianapolis, Ind., the contract for the equipment of same, at $10,-490 f. o. b. Spokane. G. W. Armstrong is Secy. Bd. of Public Works.

LOS ANGELES, CAL.—Bids are asked by the Board of Supervisors until 2 p. m., March 28, for improvement of certain portions of Eagle Rock Road in this county.

It is stated that W. N. CRANDALL, 310 Stimson St., Los Angeles, has been awarded the contract by Board of Supervisors for constructing the Hollywood-Toluca Road, up the Cahuenga Pass, a distance of 6,470 ft., at $12,935. Mr. Crandall's bid for highway work on Huntington Drive was rejected, it being considered too high. No other bids were submitted. The Highway Commission has been authorized to do the work itself.

RIVERSIDE, CAL.—The STAR CEMENT CO. has been awarded a contract at $14,827 for improving Ninth St., from Lemon St. to Sedgwick Ave. Other bids were submitted by Johnson-Shea Co., $16,466; Shull, Miller Co., $16,557.

SAN DIEGO, CAL.—Plans and specifications will be ready soon for estimating cost of constructing military boulevard at Fort Rosecrans. A boulevard 16 ft. to 25 ft. wide is proposed, and over three miles long, surfaced with granite or macadam, $40,000 is available for the work. Carl E. Lohr is Constr. Q. M., Fort Rosecrans, San Diego, Cal.

The following bids have been received at San Diego, Cal., by Board of Supervisors for the construction of a road on Musseys grade, to be a portion of the new county highway. T. C. Kilty, $17,144; M. D. Goodbody, $18,-156; G. E. Gabrielson, $18,847. All bids were rejected and new bids will be called for soon to include mules, wagons, tools, machinery required for the constructing of the highways.

STOCKTON, CAL.—Specifications are being prepared for improving Cherokee, Waterloo and Linden Roads, etc., and bids probably will be called for about April 1. F. A. Eckstrom is Secy. County Highway Comn.

GLOBE, ARIZ.—Bids will be received until April 6 by the Board of Control, Territory of Arizona, at Phoenix, for constructing a highway between the towns of Roosevelt and Globe, Gila County. J. J. Riggs is Secy.

SALT LAKE CITY, UTAH.—Bids will be received until April 1 by the Board of Public Works for paving Third South St. and Rio Grande St., in Paving Extension No. 42. H. G. McMillan is Chn.

STRATFORD, ONT.—Bids are asked by M. Ferguson, City Engr., until 5 p. m., March 29, for about 57,000 sq. yds. of paving.

MOOSE JAW, SASK.—Bids will be received until 8.30 p. m., April 11, for constructing 33,300 sq. yds. of pavement, 13,500 lin. ft. combined curb and gutter, and 116,-500 sq. ft. concrete sidewalk. Angus Smith is City Engr.; W. F. Heal is City Clerk.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

NEW BEDFORD, MASS.—The management of the Kilburn Mill has awarded a contract to J. J. PRINDIVILLE CO., of South Framington, for an addition which will be erected north of the present plant of the company. At a meeting of the stockholders of the Kilburn Mill an increase in the capital stock of the company from $750,000 to $1,500,000 was authorized.

WOONSOCKET, R. I.—We are officially advised that a contract has been awarded to the TORRINGTON BUILDING CO., of Torrington, Conn., for the construction of the first installment of the yarn mill of the Samoset Worsted Mills, of Woonsocket. The buildings include a main building, 158 × 115 ft., four floors, and an office, 24 × 45 ft., one floor. Both buildings will be of brick and slow-burning mill construction, with steel beams, tar and gravel roof. Charles T. Main, 201 Devonshire St., Boston, Mass., is Arch. and Engr.

Plans being made for the Nyanza Mills, of Woonsocket, will include a mill 275 × 135 ft., four stories high, of brick construction. The initial installation will be 25,000 spindles, electrically driven, producing about 2,000,000 lbs. of cotton yards annually. It is the idea eventually to double this capacity, the plans being drawn to allow for this without difficulty. The mill will be erected on land adjoining the property of the Samoset Worsted Co., mentioned above.

Work will begin as soon as the frost is out of the ground, and it is expected to be in operation by November. The capital stock is $500,000 and John W. Farwell is the President.

NEW MILFORD, CONN.—We are officially advised that the plant of the New Milford Foundry & Machine Co., which was burned March 1, will be rebuilt, according to the plans of the owner, Jasper A. Northrop. The loss by the fire was $20,000, including valuable patterns. Estimates are being received. Frank E. Rowe is Arch., New Milford. Engine, lathes and crane may be required.

STAMFORD, CONN.—We are officially advised that Charles T. Main, Mill Engr. and Arch., 201 Devonshire St., Boston, Mass., has completed plans for three buildings for the Yale & Towne Mfg. Co., Stamford. The plans cover Building No. 6, 57 × 57 ft., six floors, 3 floors reinforced concrete, 3 floors slow burning mill construction, saw tooth roof; Building No. 12, 153 × 50 ft., six floors, slow burning mill construction, all beams of wood, saw tooth roof; Building No. 12½, 60 × 50 ft., six floors, reinforced concrete throughout except roof of slow burning mill construction. All these buildings will have walls of brick, first floor on ground level and every floor waterproofed. They will have tar and gravel roofs. Estimates are being received.

NEW YORK, N. Y.—Grosvenor Atterbury, Arch., 20 West 43d St., New York, is preparing plans for a factory to manufacture concrete blocks and to be situated at Forest Hills, Boro. of Queens. Cost, $10,000.

SYRACUSE, N. Y.—Albert Kahn, Arch., 800 Trussed Concrete Bldg., Detroit, Mich., is preparing plans and specifications for a factory plant consisting of one large building and several smaller buildings, for Brown, Lipe, Chapin Co., 200 South Geddes St., Syracuse, N. Y. Plant to cost $250,000. The entire plant will be used for the manufacture of differential gear of automobiles. Reinforced concrete (Kahn system), steel and structural iron will be used in construction.

NEW BRIGHTON, PA.—The Standard Connecting Rod Co. has awarded the general contract for an addition to its plant to MAX MOFFETT, of Beaver Falls, Pa. The building will be of concrete, 100 ft. wide by 600 ft. long.

BRADDOCK, PA.—Splice bar mills, to cost $300,000, as an addition to the Edgar Thompson Works of the U. S. Steel Corporation at Braddock, will be erected, according to the announcement made to Braddock business men recently by the President of the Carnegie Steel Co. All spliced bars used by the steel corporation will be made in the new mills.

GREENVILLE, PA.—Plans have been made for the buildings to be erected and the additional machinery to be installed at the Greenville shops of the Bessemer & Lake Erie R. R. Co., and which will involve an expenditure of $250,000 to $300,000.

YORK, PA.—G. F. Taylor, of York, Pres. of the American Rust Proof Gun Barrel, Brass Lining & Gun Mfg. Co., has purchased as the site of the proposed plant a plot of ground on West Market St., opposite the Cliff House, which was owned by Adam F. Krout, and has a frontage of 140 ft. The promoters of the project have arranged for a 2-story brick building, 40 ft. wide, to occupy the entire length of the property. MARTIN ZARTMAN has the contract for the brick work and it is expected to have the factory in operation by May 1.

PHILADELPHIA, PA.—Charles W. Young & Co., 1255 North 26th St., through William H. Young, have bought from Robert J. Peoples the houses at 1239-41-47-49 North 26th St. The company, which now owns the houses at numbers 1243-45 26th St., will use the total lot to build an addition to its soap factory at 1251-57 North 26th St.

The Philadelphia Warehousing & Cold Storage Co., which is building an addition to its plant at Delaware Ave. and Noble St., contemplates building another addition. The building now in course of construction, for which CRAMP & CO., Commonwealth Bldg., have the contract, will cost when completed about $400,000. Plans are being prepared for the second addition to the plant, which will cost about $200,000. Work on this, it is expected, will be begun before May 1.

Work will be begun April 1 on the erection of a factory and office building at the northwest corner of 20th and Clearfield Sts. for the C. R. Carver Co. A permit has been issued to S. B. MACDOWELL & SON, 1927 Montgomery St., who have the contract, for $18,000.

WILMINGTON, DEL.—Plans have been completed for an addition to the plant of the Wilmington Malleable Iron Co., New Castle Ave. and F St., South Wilmington. Cost, $50,000.

NORTHWILKESBORO, N. C.—The Finwin Cotton Mills Co., of Northwilkesboro, is planning the construction of a mill to be equipped with 3,000 spindles and accompanying apparatus for the production of cotton yarns. The cost of the plans is estimated at $70,000, but it may be decided to build for a greater equipment. The company's capital stock is $150,000 and J. Locke Erwin, of Concord, N. C., and T. B. Finley, of Northwilkesboro, are the incorporators.

WINSTON-SALEM, N. C.—The Shamrock Mills Co., of Winston-Salem, N. C., will build an additional mill. It will erect a 2-story, 100 × 200-ft. building, of saw-tooth construction, and install electrical motors direct connected to the shafting, compressed air for cleaning mill, sprinkler system for fire protection, etc.

COLUMBIA, S. C.—The management of the Glencoe Cotton Mills, of Columbia, S. C., has awarded contract to the MASON MACHINE WORKS, of Taunton, Mass., for an equipment of 5,000 spindles and accompanying machinery for manufacturing cotton yarns. The company has a capital stock of $100,000 and the following officers: Pres., T. H. Wannamaker, of Orangeburg, S. C.; Vice-Pres., G. M. Berry, of Columbia, S. C.; Secy., T. H. Wannamaker, Jr., of Orangeburg, S. C. The textile machinery will be driven by 225-HP. and will have a daily capacity of about 7,000 lbs. of twines and warp. Shand & Lafaye, of Columbia, S. C., are Archs.

WEST POINT, GA.—There has been a change in the presidency of the Long Mfg. Co., of West Point, Ga., according to the "Commercial Bulletin." William T. Lang, of Knoxville, Tenn., has been elected Pres. and Treas., which will result in his building here his Castle Cotton Mills. This enterprise is planned to have 100,000 spinning spindles, 10,000 twisting spindles, 2,400 looms and accompanying apparatus. Its capital stock is to be $1,000,000 and the proposition was at first contemplated for location at either Knoxville or Chattanooga, Tenn. Electric power will be used and the electricity will be obtained from the water-power electrical development new under way on the Chattahoochee River between West Point and Columbus. The buildings probably will be of reinforced-concrete construction. C. R. Makepeace & Co., of Providence, R. I., probably will be the mill Archs. and Engrs.-in-Charge. It is expected that details of the Castle Cotton Mills organization will be determined in the spring.

NEW ORLEANS, LA.—The United Fruit Co. will erect a cooling plant for banana cars, to cost $150,000. C. H. Ellis is Mgr.

LENOIR CITY, TENN.—The Holston Mfg. Co., of Lenoir City, has decided to increase its capital stock from $250,000 to $350,000. This action will be followed by the erection of an additional building which will be equipped with machinery to effect an increase in the output. The company is operating an equipment of 500 knitting machines, driven by steam power and producing cotton hosiery which the company both dyes and finishes.

OOLTEWAH, TENN.—The Ooltewah Hosiery Mills, of Ooltewah, Tenn., will be organized with a capital stock of $20,000 by P. M. Cate, T. H. Stokes, Edward Robinson, O. G. Hughes and J. S. Marshall. This company will expend $7,500 to erect a brick building, and will install spindles, knitting machines, etc. It will receive bids for building and machinery about April 1.

MEMPHIS, TENN.—A plant will be constructed in this city by the International Stock Food Co., International Exposition Bldg., Minneapolis, Minn. It is to have a capacity of 300 tons per day, and is to be ready for operation by the middle of August. The plant will give employment to 75 persons from the start. M. W. Savage is at the head of the enterprise.

CINCINNATI, OHIO.—The Banner Grocers' Baking Co. will soon proceed with the erection of its $100,000 plant at the northwest corner of Oak St. and Stanton Ave., Walnut Hills. Surveys of what is generally known as Bullock's Field have been completed. The Reliance Engineering Co., Fourth National Bank Bldg., has been given the commission for laying out the engineering part of the plant. The lot is 125 × 300 ft. The structure at the corner will be of two stories and the rear part but one. There will be 21 ovens with a daily capacity of 110,000 loves of bread. The interior of this bakeshop will be lined with white glazed tile. There will be a convention hall, 40 × 160 ft., which will be for the use of persons allied with the baking industry. The power plant will be 45 × 65 ft., and will have a capacity of 200 KW. Besides this, there will be a matzos bakery.

COLUMBUS, OHIO.—The Hayden-Corbett Chain Co. is planning to erect an addition to its plant on Lorain Ave. in the spring and also to replace the part recently destroyed by fire.

LIMA, OHIO.—Albert Kahn and E. Wilby, Archs., 800 Trussed Concrete Bldg., Detroit, Mich., are preparing plans and specifications for a factory plant of three buildings, of two stories each, 100 × 75, 200 × 75 and 400 × 75 ft., for the Grann-Logan Motor Co., of Lima, Ohio. Stock brick, reinforced concrete, composition roof and structural iron will be used in construction.

TOLEDO, OHIO.—The Toledo Machine & Tool Co. has purchased from E. P. Breckenridge and the Tolerton Estate a tract of land adjoining its plant. The property secured extends from Hastings St. to the Lake Shore tracks, a distance of 500 ft. It is L-shaped and has a frontage on the Lake Shore road of 260 ft. It was formerly owned by the Yost Mfg. Co., and two factory buildings are now located on the property. These are to be torn down by the Toledo Machine & Tool Co., and a building erected which will be six stories high and 100 × 425 ft. At the present time the company has a pay roll of more than $300,000 per year. With the proposed improvement the company will have a total of 400,000 sq. ft. of floor space.

CLEVELAND, OHIO.—The Ohio Blower Co. has purchased a lot of land, about 2¼ acres, from the Schofield Estate in Cleveland. The property is located east of 55th St. and north of the Erie R. R. station, East Side. It is the intention to start construction of a factory within a year. D. K. Swartwout is Pres. and Treas.

ANDERSON, IND.—The De Tamble Motors Co. is preparing to make extensive improvements to its plant, and about $9,000 worth of new machinery is to be installed. The company also will increase its working force from 235 to 370 men.

BRAZIL, IND.—The Domestic Coal Co. will soon ask for bids for the construction and equipment of a clay product manufacturing plant.

BRAZIL, IND.—The Brazil Machine & Foundry Co. will ask for bids soon for the erection of an addition to its plant.

INDIANAPOLIS, IND.—The Lake Erie & Western R. R. Co. is asking for bids for the construction of a brick round-house on the Noble St. site. W. G. Atwood is Ch. Engr., Indianapolis.

DETROIT, MICH.—The Clayton-Lambert Mfg. Co., Beaubien St. and Trombley Ave., Detroit, have purchased a block, 450 × 500 ft., upon which it will build an addition to its present plant. Malcomson & Higginbotham, Archs., Moffat Bldg., will prepare plans and specifications.

The Michigan Motor Car Co. has purchased a site and will erect a manufacturing plant at a cost of $1,000,000. H. M. Thomas is Trustee, 353 Bagg St., Detroit.

The True Blue Motor Co. has been incorporated and capitalized at $100,000 and will erect a manufacturing plant in the spring. Maurice Wolf is Mgr., 445 Sheridan Ave., Detroit, Mich.

Lowrie & Robison Lumber Co., 2569 Jefferson Ave., West, has let the general contract for its proposed factory building, 170 × 185 ft., to F. E. CARLETON, 624 Fourth Ave., Detroit, at $22,000.

WYANDOTTE, MICH.—Harley & Atcheson, Archs., 80 Griswold St., have prepared plans for a 2-story building, 200 × 80 ft., for the Whistler Mfg. Co., of Wyandotte, Mich. Stock brick, Bedford cut stone, composition roof, structural iron and cement flooring will be used in construction.

Varney, Winter & Varney, Archs., Equity Bldg., Detroit, Mich., are preparing plans and specifications for a 2-story factory building, 300 × 60 ft., for the Swift Automobile Co., W. R. Boulter, Mgr., 1120 Chamber of Commerce Bldg., Detroit. The factory is to be located on Mulberry Ave., Wyandotte, Mich. Construction will be of paving and stock brick, Bedford or artifical cut stone, composition roof and structural iron.

PONTIAC, MICH.—The E. M. F. Automobile Co. is arranging to build an addition to its present plant on Piquette Ave. W. E. Flanders is Mgr., Pontiac.

GRAND RAPIDS, MICH.—Robinson & Campeau, Archs., Houseman Bldg., Grand Rapids, Mich., have prepared plans and specifications for a 5-story factory, 66 × 140 ft., for W. C. Hopson & Co., 25-29 Campeau St., Grand Rapids, Mich. It will be of brick and mill construction.

DETROIT, MICH.—The National Fulton Brass Mfg. Co. has purchased a site at the corner of East Grand Boulevard and Chene St., where it will build a manufacturing plant at an estimated cost of $100,000. John F. Harrington, Pres., 22-28 Brush St.

The Electric Heater Co. has purchased a site at the southwest corner of Lafayette Boulevard and Tenth St., where it will erect a factory. George Mitchell is Mgr., 72 Brush St.

Albert Kahn and E. Wilby, Archs. and Engrs., Trussed Concrete Bldg., Detroit, are preparing plans and specifications for a 2-story factory building, 580 × 60 and 240 × 60 ft., for the Hudson Motor Car Co., Hugh Chambers, Mgr., at the corner of Jefferson Ave. and the Belt Line. The building is to be of reinforced concrete.

The Glass Enameled Package Co. has been incorporated, capitalized at $600,000, and has purchased five acres of land at Gratiot Ave. and the Belt Line and will build a manufacturing plant. Henry C. Wiedeman is Mgr., 948 Beaufait St.

Rogers & MacFarlane, Archs., Penobscot Bldg., Detroit, have let the masonry contract for the Detroit Column & Mfg. Co., Edwin Everts, Secy., 331 Holden Ave., to GEORGE A. VIVIER, 479 Forest Ave., for $13,000.

The Kelsey-Herbert Co., 566-76 Kirby Ave. W., has let general contract for its 1-story factory, 63 × 166 ft., to SCHMIED, SISMAN CO., 391 Beaufait Ave.

Albert Kahn and E. Wilby, Archs., 800 Trussed Concrete Bldg., Detroit, have let the general contract for factory building No. 17, five stories, 382 × 60 ft., for the Packard Motor Car Co., S. D. Waldon, Gen. Mgr., East Grand Boulevard and the Belt Line, to L. A. HARRISON, 70 Thaddeus St., Detroit.

The Hoyt Laundry Co., Thomas J. Hoyt, Pres., 204 Michigan Ave., Detroit, has let the general contract for its proposed 2-story laundry building to J. E. HUGG & CO., 445 Military Ave., Detroit.

CUDAHY, WIS.—The Power & Mining Machinery Co., of Cudahy, has had plans prepared for the following buildings to be erected at once: Foundry, 2-story, 360 × 75 ft., of brick and steel; machine shop, 1-story, 360 × 220 ft., brick and steel construction; pattern storage warehouse, 4-story, brick and frame, 150 × 100 ft. All foundations are to be of concrete. Plans are being completed by the company's architects and engineers.

MARSHALLTOWN, IOWA.—A machine shop 100 × 250 ft. will be added to the works of the Lennox Machine Co., Marshalltown. The equipment details have not been fully determined upon.

A plant will be erected this season at East Main St. and Eighth Ave., for the C. A. Dunham Co. and the National Vacuum Heating Co., to cost $30,000. The foundations are already in for three of the buildings. The office building will be 2-story, 58 × 54 ft., of brick with tile roof and modern sanitary appliances. The factory building will be 2-story, 40 × 80 ft., of brick and steel construction, with freight elevators, toilet rooms and chemical laboratory; the power-house will be 40 × 38 ft., of fireproof construction.

*FORT D. A. RUSSELL, WYO.—Bids are asked by Capt. V. K. Hart, Q. M., Keefe Hall, Cheyenne, Wyo., until 9.30 a. m., April 13, for the construction, plumbing, wiring for electric motors and lights, electric fixtures, furnishing and installation of laundry machinery and equipment, boiler, feed pump, etc., for one laundry at Fort D. A. Russell, Wyo.

WACO, TEX.—The Citizens' R[illegible] Co. is planning to build a repair sho[illegible]nd car house at Waco. The estimated c[illegible] is $75,000. Preston Graves, Pierce [illegible], St. Louis, Mo., is Purchasing Agt.

LINNTON, ORE.—Emil Schach[illegible] Son, Archs., Commonwealth Bldg., Port[land], Ore., have completed plans for a new [plant] for the Columbia Engineering Works [of] Linnton. This company is now at T[illegible] and Kearney Sts. The new building [will] be located between the railroad tracks [and] the River, and will be equipped with a [fo]undry, a machine shop, pattern rooms a[nd] general offices. Cost, $50,000.

SACRAMENTO, CAL.—Engineer[s] representing the operating and constru[ction] departments of the Western Pacific [R. R.] Co. have looked over the proposed si[te] of the railroad shops to be erected here. [Wo]rk on the shops, which will cost $750,000, [wi]ll be commenced, it is stated, in about [a] month. The plant is for handling the rep[air]s, rebuilding and overhauling for the [We]stern Pacific from Salt Lake to the Bay. All of the buildings are to be of concrete [and] steel. T. J. Wyche is Ch. Engr., San F[ran]cisco, Cal.

MANHATTAN BEACH, CAL.—A p[la]nt for manufacturing brick, from cement a[nd] sand, will be erected here, at a cost of [illegible],000, by the Pyramid Cement Products [Co.], 207 Mercantile Pl., Los Angeles, Cal. [A] spur track will be constructed to the plant by the Santa Fe R. R., a distance of 960 [ft.] The plant will have a capacity of 25,000 [bric]k.

GLOBE, ARIZ.—The Globe Foundry & Machine Co. has secured a site upon which a building will be erected.

SALT LAKE CITY, UTAH.—The White Co., Cleveland, Ohio, manufacturer of the White steam car, has prepared plans for the erection of a factory building at Salt Lake City, Utah, which will cost approximately $50,000. The building will be 75 × 132 ft., three stories and basement, and will be used for the manufacture of automobile bodies and the repairing of all parts of machines. A part of the basement and of the first floor will be used as a garage, and the top floor will be used for shop purposes. It is expected that the building will be finished and ready for occupancy by June 1. P. R. Melchert will be Mgr.

MONTREAL, QUE.—Ross & McFarlane, Archs., 1 Belmont St., have awarded contracts for remodeling and alterations to the Riordan Paper Co.'s property at 1 Beaver Hall Sq., as follows: General contract, C. J. BROWN; roofing, GEORGE W. REED & CO., LTD.; plumbing and heating, JAMES BALLANTYNE; electric wiring, M. RUBENSTEIN.

TORONTO, ONT.—The United Typewriter Co. has increased its capital and is erecting an addition to its present factory, 400 × 100 ft. The plant will have, when completed, a capacity for 500 machines daily. J. J. Seitz is Pres., Toronto.

KENORA, ONT.—The Royal Canadian Milling Co. is being organized with a capital of $1,000,000, and will build a milling plant here with a capacity of 5,000 bbls. per day.

ST. CATHARINES, ONT.—The Canadian Crocker-Wheeler Co., of Montreal, Que., has purchased a site of eight acres at St. Catherines, Ont., on which are practically new buildings having a floor space of about 30,000 sq. ft. The company will install in these buildings tools and equipment for the manufacture of electrical apparatus.

WINNIPEG, MAN.—The Manitoba Glue Co. will erect a plant at St. Vital, four miles from Winnipeg. The company has been organized with James Powers, Pres.; H. P. Bilodeau, Vice-Pres., and F. J. G. McArthur, Secy.-Treas. Head office, Winnipeg.

MISCELLANEOUS CONTRACTS.

(denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

ROAD OIL, PRESERVATION.—Cleveland Heights, Ohio.—See item under Streets and Roads.

DRAINS.—Mitchell, S. Dak.—Bids will be received by H. B. Anderson, County Audr., until April 5, for constructing the drains in Drainage District No. 4.

DREDGING.—Boston, Mass.—Bids will be received by the Bureau of Yards and Docks, Washington, D. C., until 11 a. m., April 2, for dredging at the Boston Navy Yard.

STREET OILING.—Portland, Ore.—Contract for oiling 200 miles of streets in this city is reported to have been awarded to the PORTLAND ROAD OILING CO., at $28,000.

WHARF.—Victoria, B. C.—Contract for the new Grand Trunk Pacific Railway wharf here has been let to C. J. JOHNSON & CO., of Vancouver, B. C., and Seattle, Wash. Work will be rushed immediately.

*REVETMENT. — Vicksburg, Miss.—Bids will be received by Capt. C. S. Smith, Corps Engrs., U. S. A., Vicksburg, until noon, April 19, for furnishing brush and poles for revetment work in this district.

DITCH.—Albion, Ind.—The Commissioners of Noble, Kosciosko and Elkhart Counties have awarded contract to L. T. MILLER, of Fairmount, Ind., for the construction of 9,000 ft. of ditch in these counties.

FIRE APPARATUS.—Vancouver, B. C.—Bids will be received by William McQueen, City Clerk, Vancouver, B. C., until April 21, for the following automobile fire apparatus: Two hose wagons, two chemical engines and one aerial ladder.

DITCH.—Anoka, Minn.—Contract has been awarded to FRED. JOHNSON, Grandy, Minn., at 9 cts. per cu. yd., for constructing County Ditch No. 51, requiring about 41,415 cu. yds. of excavation. Arthur A. Caswell, County Audr.

DITCH.—Palmyra, Ind.—R. A. BROWN & CO., Washington, Ind., have contract for building the Simpson drainage ditch at $8,700. The proposed ditch is partly in Palmyra and partly in Harrison townships, and will be five miles long.

COAL BARGES.—Seattle, Wash.—Contract to build four coal barges for Waterhouse & Co. has been awarded to JOHN McATEE, of Seattle, at $25,272. They will be built under the direction of David Baird and John Jordison, of the Waterhouse Co.

DRAINAGE.—Amboy, Ill.—John M. Egan, Jr., of Amboy, Ill., is in charge of construction work on the Inlet Swamp Drainage District, in Lee County, Ill. Litigation in this case has been settled and work amounting to $250,000 has been authorized.

DITCH, ETC.—Piggott, Ark.—Bids will be received by Polk Mobley, Clk. County Comrs., until March 26, for constructing main ditch and laterals in District No. 9, about five miles east of Piggott. Estimated quantities, about $470,927 cu. yds.

LEVEE.—Logan, Ohio.—Bids will be received until March 24 by the State Board of Public Works at Columbus for rebuilding the levee embankment on the Hocking Canal slack water, about ¼ mile above the Worthington Dam in Hocking County.

DOCK WORK.—Camden, N. J.—The City Council has awarded contract to AARON WARD to build a pier at the foot of Cooper St., at $46,991; also the contract to build the wharf at Cooper's Creek and Federal St., at $2,201, and for bulkhead sewer of Clinton St., at $8,991.

DREDGING.—Ashland, Ohio.—Contract was let to J. A. ROBERTS, of Ashland, at 9.7 cts. per cu. yd., by T. Brindle, County Surv., at public outcry on March 18, for constructing Jerome Fork Improvement, consisting of 11¾ miles of dredge work, about 315,000 cu. yds.; also for about 1¼ miles of hand work.

DITCH.—Conde, S. Dak.—Bids will be received until May 4 by the Board of County Commissioners at Redfield, for the entire construction of an open dredge ditch, known as the Conde Drainage Ditch, about 145,000 cu. yds. of excavation. J. C. Carpenter is the Engr., Watertown. W. J. Bingham, County Audr.

LEVEE, ETC.—Cameron, Tex.—Bids will be received until April 9 by the Commissioners of the Hefley Improvement District of Milam County, at Cameron, for constructing levee and outlet gate; levee 5.36 miles in length; outlet gate, containing 3 M. ft. lumber, treated with creosote. Tenille Henderson, Engr., Cameron.

ORE DOCK.—Superior, Wis.—Contract for the new steel ore dock for the Great Northern Ry. Co., at Allouez, has been let to BARNETT & RECORD, of Superior. The contract awarded will approximate $500,000. The total will amount to about $1,000,000, including the contract which was let some time ago to the AMERICAN BRIDGE CO.

DITCH.—Knox, Ind.—John E. Perkins, Construction Comr. for the Kyle ditch in Laporte and Stake Counties, has awarded the contract for the construction of the ditch to COLEMAN & SONS, of Hamlet, Ind., at 6¼ cts. per cu. yd., making the total cost of the ditch between $10,000 and $11,000. The ditch will be 12 miles long.

FUEL OIL.—Galveston, Tex.—The Gulf, Colorado & Santa Fe Ry. Co. has signed a contract with the GULF PIPE LINE CO. for 3,900,000 bbls. of fuel oil for its Texas lines, the contract to go into effect July 1, 1910. The amount of the contract is over $3,000,000. The delivery will be made at Houston and Saratoga, where the oil company has loading racks.

MARSH RECLAMATION.—New Orleans, La.—A. M. Shaw has been appointed Engineer and Resident Manager of the reclamation work of the Phillips Land Co., with headquarters in New Orleans. This company has 80,000 acres of marsh land in the Parishes of Plaquemines and St. Bernard, La., and is now building a 2½-yd. dredge for levee construction.

IRON FENCE.—Boston, Mass.—Bids were received as follows by the Charles River Basin Commission on March 14 for furnishing and erecting about 1,700 lin. ft. galvanized iron fence in the vicinity of the lock in Charles River Dam: The VULCAN RAIL & CONSTRUCTION CO., 175 North Ninth St., Brooklyn, N. Y., $8,364 (awarded contract); W. A. Snow Iron Works, Inc., 19 Portland St., Boston, $8,700.

PILES, ETC.—New Orleans, La.—Bids were received on March 4 by Lieut.-Col. Lansing H. Beach, Corps Engrs., U. S. A., New Orleans, for piles and walling timbers, on the river bank or wharves in Southwest Pass, Mississippi River. Contract for piles was let to SALINEN BRICK & LUMBER CO., Ltd., New Orleans, at $16,445; for walling timbers, to BRYAN BLACK LUMBER CO., New Orleans, at $2,004.

WAGONS.—Washington Barracks (Washington post-office), D. C.—Bids were received on March 5 by Lieut.-Col. W. C. Langfitt, Corps Engrs., U. S. A., for furnishing four tool wagons, 35 chest wagons and 20 ponton wagons, as follows: Leonhardt Wagon Mfg. Co., Baltimore, Md., $15,240; George R. Marks, Brooklyn, N. Y., $14,836; STUDEBAKER BROS. MFG. CO., South Bend, Ind., $13,699 (awarded contract).

DRAINAGE.—Spencer, Iowa.—Bids were received on March 18 by the Board of County Supervisors for constructing the Ocheyedan River improvement, known as Drainage District No. 6, requiring 610,754 yds. excavation in Sections 1-6, consecutively, and separate bid for Section 7, 1,167 yds. A. W. Chamberlain, County Audr. Contract was let to JOHN McANDREWS, Kankakee, Ill., at 5.97 cts. per cu. yd. for main ditch. Contract for laterals was not let.

TORPEDO BOATS.—Washington, D. C.—The time for receiving bids for constructing by contract four submarine torpedo boats (Nos. 28-31), called for by advertisement of Dec. 8, 1909, has been extended from Feb. 15 to April 1. A supplementary schedule defining the chief characteristics of said vessels has been prepared and is now ready for distribution among prospective bidders. Beekman Winthrop, Asst. Secy., Navy Dept.

*DREDGING.—St. Paul, Minn.—Bids will be received until noon, April 11, by the Board of Water Commissioners for dredging the West Arm of Vadnais Lake, situated about seven miles from the city of St. Paul. The work will consist of about 1,500,000 cu. yds. The material is mostly vegetation and peat. The work to be done in accordance with the plans and specifications on file in this office or the office of Engineering News, New York. John Caulfield, Secy. Bd. Comrs.

*DITCH.—Warren, Minn.—Bids were received as follows on March 1 at the office of A. G. Lundgren, County Audr., of Marshall County, in the Court House in the City of Warren, for digging and constructing Judicial Ditch No. 11 of Marshall and Beltrami Counties. Estimated quantities, 5,094,102 cu. yds. drtdge work. W. R. Hoag, 1320 Seventh St., Minneapolis, Minn., is Engr. Contract was awarded to the NORTHWESTERN DRAINAGE CO., Grand Rapids, Wis., at 10.3 cts. per cu. yd.

CANAL.—Oklahoma City, Okla.—Bids were received by the Board of County Commissioners Feb. 14 for construction of a canal through Deep Fork Drainage District No. 1. Estimated cost, $100,000, including necessary bridges. Canal will be about 13¼ miles long. Contracts have been awarded as follows: For 779,000 cu. yds. earth excavation, to G. H. KEEGAN, of Fort Wayne, Ind., at 7.74 cts. per cu. yd.; for 14 steel bridges, to the KANSAS CITY BRIDGE CO., Kansas City, Mo., at $23,899.

CANAL, LEVEE.—Cairo, Ill.—Contracts have been awarded for building levees to protect a tract of nearly 10,000 acres of land in the northwestern part of Alexander County from floods in the Mississippi River. ROACH & STANSELL, of Memphis, Tenn., have been awarded the levee work at 12.95 cts. a cu. yd.; R. H. and G. A. McWILLIAMS, of Mattoon, Ill., the ditch work at 9 cts. The estimated cost of improvement is $80,000. The levee work is to be completed by July 1.

DRY DOCKS.—Port Arthur, Ont.—The CANADIAN STEWART CO., Sovereign Bank Bldg., Montreal, Que., has secured the contract to build the new dry docks at Port Arthur. The Dominion Government has guaranteed the bonds to the extent of $1,200,000. Mayor Matthews, of Port Arthur, is quoted as saying that "by the summer of 1911 two of the largest ships ever launched in fresh water will be completed at Port Arthur in our new shipbuilding plant. These boats will be of 10,000 tons capacity, and will be 524 ft. long."

BULKHEAD.—Philadelphia, Pa.—Joseph F. Hasskarl, Acting Dir. of the Dept. of Wharves, Docks and Ferries, received bids on March 9, for the construction of a concrete bulkhead on the Delaware River at South St., as follows: LATTA & TERRY CONSTRUCTION CO., Pennsylvania Bldg., $8,441; Filbert Paving & Construction Co., $9,300; B. F. Sweeten & Son, $9,807, and the American Paving & Construction Co., $9,925. After the completion of the bulkhead the Gloucester Ferry Co. will erect a new ferry house at a cost of $40,000.

DRAINAGE.—Woodstock, Ill.—Bids were received on March 4 by the Commissioners of Rush Drainage District, at Woodstock, for constructing a system of drainage for the Rush Creek Drainage Dist., town of Dunham, requiring about 88,000 yds. of open ditch and 24,000 ft. of tile drains. Contract for open work awarded to W. A. JONES & CO., Syracuse, Ind., at $8,860. A. L. Webster, Wheaton, Ill., Engr.

Bids will be received until April 15 by the Drainage Commissioners, as above, for 24,000 ft. of 16, 12, 10, 8 and 4-in. tile.

RETAINING WALL.—Bristol, Conn.—Bids for the construction of a retaining wall for the Federal Building have been received by the Supervising Architect, Treasury Dept., Washington, D. C., as follows: PIERSON ENGINEERING & CONSTRUCTION CO., Bristol, Conn., $7,400; F. W. Abbott Co., New York, $7,950; F. T. Ley Co., Springfield, Mass., $13,700; George W. Currie, Bristol, Conn., $10,000; New York Construction Co., Boston, Mass., $9,870; F. B. & W. H. O'Neil, Hartford, Conn., $16,200; John A. Rooney, Boston, $9,820; M. McManus Construction Co., Philadelphia, Pa., $8,970; Michael Hannigan, New York, $7,498.

DRAINS.—Eldora, Iowa.—As the contract was not awarded on Jan. 12 by the Board of Supervisors of Hardin County for construction of a tile ditch and drain in Buckeye Township, new bids were received on March 7. R. A. Vigars, County Audr. Contracts were awarded as follows: Drain in Dist. No. 10: Tile—to the ELDORA PIPE & TILE CO., at $4,920; labor, J. H. SCHRIVER, Mason City, Iowa, at $4,925. Dist. No. 12: Labor, S. J. GARBERICK, Sheldon, Iowa, $2,850. Bids were rejected on drain for Dist. No. 11. New bids will be received on April 4 for Districts No. 11 and No. 14. S. B. Gardner is City Engr.

STEEL, CASTINGS, BOLTS, ETC.—Wheeling, W. Va.—Bids were received on Feb. 17 by Capt. F. W. Alstaetter, Corps Engrs., U. S. A., for furnishing and delivering structural steel forgings, steel and iron castings, bolts, etc., for dam No. 26, Ohio River. Lowest bidders were as follows: Lot A—For 168,400 lbs. of structural steel, American Bridge Co., New York, $5,726; 11,300 lbs. steel castings, American Bridge Co., $384. Lot B—133,100 lbs. forgings, American Bridge Co., $6,322. Lot C—26,000 lbs. steel castings, American Bridge Co., $1,625. Lot D—48,500 lbs. iron castings, James H. Beans, Martins Ferry, Ohio. Lot E—19,500 lbs. bolts, etc., Independent Bridge Co., Pittsburg, $595.

CRIBWORK, ETC.—New York, N. Y.—Bids were received as follows by the Park Board on March 10 for rebuilding cribwork and filling in bank on the easterly side of the Harlem River, in Macombs Dam Park, Boro. of the Bronx: Fox, Hennessy Co., 81 E. 125th St., New York, $9,035; GODWIN CONSTRUCTION CO., 30 Church St., New York, $8,775 (awarded contract); The New York State Construction Co., 78 Broad St., New York, $11,145; Thos. O'Connor, 633 Second St., Brooklyn, N. Y., $9,195; John F. O'Heir, 3052 Perry Ave., Bronx, New York, $8,870; Grant Robrer, 299 Broadway, New York, $9,108. Itemized bids will be given next week under Contract Prices.

BULKHEAD.—Norfolk, Va.—Bids were received on March 15 by the Board of Control for constructing a bulkhead or retaining wall on both sides of The Hague. W. T. Brooke, City Engr. The bids were: E. Cross & Son Co., $8.40 per ft.; W. D. Murphy, $8.68 per ft.; E. Tatterson, $9.60 per ft.; Gwathmey Engineering Co., $9.97½ per ft.; Wm. M. Miller, $10.43 per ft.; John Monk, $10.85 per ft.; B. M. Jones, $11.73 per ft.; Sandford & Brooks, $13.90 per ft. B. M. Johns also bid $10.37 per ft. under modified conditions, and Wm. M. Miller also bid $11.38 per ft. to include steps at Fairfax and Pembroke Aves., with floats for boats, filling in behind the walls, and certain stone dressing, not required in specifications.

FORGINGS, BOLTS, ETC.—Wheeling, W. Va.—Bids were received by Capt. F. W. Alstaetter, Corps Engrs., U. S. A., Wheeling, on Feb. 28, for furnishing and delivering structural steel, steel forgings, bolts, etc., for dams Nos. 8 and 11, Ohio River, as follows: (A) Dam No. 8, (B) Dam No. 11—per lb.: The Richard Mfg. Co., Bloomsburg, Pa., (A) 5.5 cts., (B) 5.25 cts.; Independent Bridge Co., Pittsburg, Pa., (A) 3.32 cts., (B) 2.36 cts.; Penn Bridge Co., Beaver Falls, Pa., (A) 3.69 cts., (B) 3.14 cts.; American Bridge Co. of New York, Pittsburg, Pa., (A) 2.74 cts., (B) 2.74 cts.; New Jersey Foundry & Machine Co., New York, (A) 3.65 cts., (B) 3.63 cts.; Hoisting Machinery Co., New York, (A) 5.77 cts., (B) 6.7 cts.; Lawrence D. Weaning, Cleveland, Ohio, (A) 3.5 cts., (B) 3.15 cts.

PIERS.—Charleston, S. C.—Bids were received as follows by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., on March 5, for constructing torpedo boat piers, coaling pier and railroad track at the U. S. Navy Yard, Charleston: Item 1, for constructing four torpedo boat piers and one coaling pier; item 2, three torpedo boat piers and one coaling pier: The Robbins-Ripley Co., 50 Church St., New York, item 1, $53,500; 2, $45,600. The Clark & Winston Co., Washington, D. C., item 1, $60,000 and $58,800; 2, $53,200 and $52,000. Wm. L. Miller, 19 Milk St., Boston, Mass., item 1, $54,900; 2, $48,743. The Simons-Mayrant Co., Charleston, S. C., item 1, $47,878; 2, $40,878. Grant-Wilkins, 23½ Whitehall St., Atlanta, Ga., item 1, $48,600; 2, $42,100. The Charleston Engineering & Contracting Co., 55½ Broad St., Charleston, S. C., item 1, $50,058; 2, $42,750.

DREDGING.—Wilmington, Del.—Bids were received by Maj. R. R. Raymond, Corps Engrs., U. S. A., on March 18 for dredging (A) the Mispillion River and (B) the Appoquinimink River, Del., as follows: Miner Engineering Co., Washington, D. C. (conditional upon award of contract for dredging St. Jones and Murderkill Rivers, Del.), (A) 18 cts. per cu. yd., (B) 18 cts.; River & Harbor Improvement Co., Philadelphia, Pa. (work to begin July 1, 1910), (A) 40 cts., (B) 14 cts.

Bids were received at the same time for (A) dredging St. Jones and (B) Murderkill Rivers, Del.: The Rickards Dredging Co., Philadelphia, (A) 14 cts., (B) 14 cts.; River & Harbor Improvement Co., Philadelphia, (A) 11.8 cts., (B) 10.9 cts.; Miner Engineering Co., Washington, D. C. (conditional upon award of contract for dredging Mispillion and Appoquinimink Rivers, Del.), (A) 18 cts., (B) 18 cts.

*DREDGING.—Savannah, Ga.—Bids were received by Col. D. C. Kingman, Corps Engrs., U. S. A., on March 9, for dredging in Club and Plantation Creeks, Ga.: (A) per cu. yd., 111,000 cu. yds.; (B) total: Simons-Mayrant Co., Charleston, S. C., (A) 17.3 cts., (B) $19,030; P. Sanford Ross, Inc., Jersey City, N. J., (A) 24½ cts.; (B) $26,950; Paschal N. Strong, Savannah, Ga., (A) 15½ cts.; (B) $17,050; Savannah Dredging Co., Savannah, Ga., (A) 17.8 cts.; (B) $19,580. Amount available, $19,957. Original estimate, dredging, 16c. per cu. yd. All bids were rejected by reason of the insufficiency of plant of lowest bidder and the fact that it was deemed to be the advantage of the United States to let the whole work at one time, when the additional funds required for the completion of the project became available, which amount is provided for in the pending river and harbor bill. When the work is readvertised, the amount to be expended will be approximately $40,000. Under the present specifications it was intended to expend only $20,000.

BARGE CANAL.—Albany, N. Y.—The plans and specifications for three additional barge canal contracts have been completed by Frank M. Williams, State Engr., and have been approved by the Advisory Board. They will shortly be presented to the Canal Board for approval and then advertised: The contracts are: No. 62, for the improvement of the canal from the west line of Monroe County to the east end of Contract No. 9 at Eagle Harbor, a distance of 14.5 miles, including the widening and deepening of the present Erie Canal, the erection of new guard gates and new bridges, together with foundations, abutments and superstructures; estimated cost being $2,152,330. Contract No. 27-A, for completing a section of the Champlain Canal from the south end of Dunhams Basin Road to the Hudson River at Fort Edward, a distance of 3.76 miles, estimated cost being $380,433. Contract No. 79, for the construction of a highway bridge over the Oswego Canal at Bridge St., Oswego, at a cost of $39,325. With the approval of Contract No. 62, practically all the plans for the work on the Western Division of the canals have been completed. F. C. Stevens is Supt. Public Works and will have charge of receiving bids on the work.

EXAMINATIONS.

LIBRARY ASSISTANT.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on May 18-19, to secure eligibles from which to make certification to fill a vacancy in the position of Library Assistant, $900 a year, Bureau of Statistics, Department of Commerce and Labor, and vacancies requiring similar qualifications as they may occur in that Department, unless it shall be decided in the interests of the service to fill the vacancy by reinstatement, transfer, or promotion. Age limit, 18 years. Application form 1312.

ENGINEER IN WOOD PRESERVATION.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 20, to secure eligibles from which to make certification to fill a vacancy in the position of Engineer in Wood Preservation, District No. 2, Forest Service, at $1,300 a year, and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interests of the service to fill the vacancy by reinstatement, transfer, or promotion. Age limit, 22 to 40 years. Application form 1312. Applications must be filed prior to closing hour on April 9.

LABORATORY APPRENTICE.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 20, to secure eligibles from which to make certification to fill vacancies in the position of Laboratory Apprentice (male) in the Bureau of Standards, Department of Commerce and Labor, at salaries of $480 and $540 a year, and vacancies requiring similar qualifications in other branches of the service as they may occur. More than one day may be required for this examination. Men only will be admitted to this examination. Age limit, 17 to 21 years. Application form 1312.

BANKING ECONOMIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 20-21, to secure eligibles from which to make certification to fill a vacancy in the position of clerk, with special qualifications in connection with banking and currency questions, $1,600 a year, Treasury Department, with fair opportunity for advancement if services prove satisfactory to the Department, and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interests of the service to fill the vacancy by reinstatement, transfer, or promotion. Age limit, 20 to 45 years. Application form 1312.

ASSISTANT PHYSICIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 20, to secure eligibles from which to make certification to fill vacancies as they may occur in the positions of Laboratory Assistant (in physics) and Assistant Physicist in the Bureau of Standards, Department of Commerce and Labor, at salaries varying from $900 to $1,200 a year for laboratory assistant and from $1,400 to $1,800 a year for assistant physicist. The duties in connection with these positions are similar to those of assistants in the physical laboratories of scientific and technical institutions. As far as practicable, appointees are assigned to work in the subjects for which they are best fitted. Age limit, 20 to 35 years. Application form 1312. Applications must be filed prior to closing hour on April 9.

ASSISTANT CHEMIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 20, to secure eligibles from which to make certification to fill such vacancies as may arise during the year in the position of Laboratory Assistant (in chemistry) and Assistant Chemist in the Bureau of Standards, Department of Commerce and Labor, at salaries varying from $900 to $1,200 a year for Laboratory Assistant and from $1,400 to $1,800 a year for Assistant Chemist. The advanced places are designed for those who have done considerable graduate work or attain exceptional grades, or show special skill in research. The duties in connection with these positions vary from routine testing to advanced work involving original investigations. As far as practicable, appointees are assigned to work in the subjects for which they are best fitted. Age limit, 21 to 35 years. Application form 1312. Applications must be filed prior to closing hour on April 9.

CHEMIST.—New York, N. Y.—The Municipal Civil Service Commission, 299 Broadway, will receive applications until 5 p. m., April 4, for the position of Chemist. The examination will be held on May 2, at 10 a. m. Candidates must have a knowledge, gained by actual experience, of general chemistry, the principles of organic chemistry and quantitative analysis (including processes applicable to food examination). Some of the questions in the technical paper will call for a knowledge of calculations of analytical chemistry. Some credit will be given on the technical paper for ability to consult reference books in French and German. The examination is open to all citizens of the United States, and the rule requiring that every application shall bear the certificates of four residents of The City of New York is waived for this examination. Minimum age, 21 years. Salary, $1,200 a year. Vacancies: Two in the Health Department; one in the Chemical Laboratory and one in the Resreach Laboratory.

CONTRACT PRICES.

*STEEL PIPE LINE.—Portland, Ore.—Bids were received by the Water Board, Frank T. Dodge, Supt., on March 8, for furnishing material and constructing a steel conduit from headworks to Mt. Tabor, a total approixmate distance of 24 miles, and consisting of 52,915 lin. ft. of 52-in. and 75,379 lin. ft. of 44-in. steel pipe and specials. The bidders were: (A) SCHAWBATCHER CO. PIPE WORKS, Sacramento, Cal., (awarded contract); (B) Grant, Smith & Co., Spokane, Wash.; (C) Buehner Co., Portland, Ore.; (D) Pacific Construction Co., San Francisco, Cal.; (E) Jas. Black Masonry & Construction Co., Seattle, Wash.; (F) Joseph Paquet & Co., Portl[and], Ore.; (G) Puget Sound Bridge & Dre[dging] Co., Seattle, Wash.; (H) Joseph Paqu[et] & Co., Portland, Ore.; (I) International [Co]ntract Co., Seattle, Wash. The itemized [bids] were as follows:

	A	B	C†	D‡	E‡	F†	G	H	I
21,145 lin. ft. 52-in. steel pipe, ¼ in. thick	$8.90	$8.70	$8.65	$8.80	$8.62	$9.10	$10.00	$9.55	[illegible]
29,657 lin. ft. 52-in. steel pipe, 5/16-in. thick	11.00	10.45	10.40	9.56	10.48	11.10	12.00	11.80	[illegible]
1,338 lin. ft. 52-in. steel pipe, ⅜-in. thick	11.00	12.50	12.30	12.85	12.37	13.00	14.00	13.40	[illegible]
775 lin ft. 52-in. steel pipe, 7/16-in. thick	13.00	14.30	14.30	15.05	14.19	14.85	16.00	15.45	[illegible]
75,379 lin ft. 44-in. steel pipe, ¼-in. thick	6.50	7.50	7.65	7.56	7.49	8.40	7.74	8.85	[illegible]
60 air valves, 4-in., with 4-in. gate valve	85.00	100.00	90.00	82.50	100.00	90.00	120.00	90.00	[illegible]
41 blow-off valves, 8-in., with 8-in. gate valve	35.00	85.00	60.00	70.80	75.00	40.00	100.00	40.00	[illegible]
2,360 lin. ft. 8-in. kalamine blow-off pipe	1.25	2.00	1.50	2.00	2.00	1.60	1.70	1.60	[illegible]
60,000 lbs. steel in trestles	.07	.10	.06	.055	.08	.07	.06	.07	[illegible]
480 cu. yds. concrete	12.00	12.00	10.00	20.00	10.00	12.30	14.00	12.30	[illegible]
1,085 lin. ft. boxing for 52-in. pipe	2.80	2.50	1.50	3.87	3.00	2.00	7.50	2.00	[illegible]
1,290 lin. ft. boxing for 44-in. pipe	2.50	2.50	1.50	3.25	3.00	2.00	6.00	2.00	[illegible]
Venturi meter for 52-in. pipe, with attachments, in place	2,300.00	3,000.00	3,000.00	3,180.00	3,000.00	5,600.00	4,000.00	5,600.00	3,50[illegible]
Venturi meter for 44-in. pipe, with attachments, in place	2,100.00	2,300.00	2,200.00	2,770.00	2,900.00	4,900.00	3,000.00	4,900.00	3,20[illegible]
195,000 cu. yds. earth excavation and refilling	.70	.65	.65	.69	.90	.54	.63	.54	[illegible]
5,000 cu. yds. loose rock excavation	1.00	.70	1.50	1.25	1.50	1.00	.90	1.00	[illegible]
1,500 cu. yds. solid rock excavation	2.50	1.75	3.00	2.50	3.00	2.00	2.50	2.00	[illegible]
25,000 cu. yds. gravel backfilling	1.25	.75	1.75	2.00	1.25	2.60	2.00	2.60	[illegible]
40,000 lin. ft. 3-in. drain tile	.11	.10	.06	.07	.10	.06	.26	.06	[illegible]
40 M. ft. lumber	40.00	35.00	25.00	35.50	60.00	66.00	40.00	66.00	40[illegible]
26,000 cu. yds. earth excavation for roadway	.50	.25	.35	.41	.75	.50	.40	.50	[illegible]
30 acres clearing and grubbing	150.00	300.00	65.00	148.00	300.00	210.00	250.00	210.00	200[illegible]
Totals	$1,259,782	$1,297,105	$1,321,789	$1,322,628	$1,376,032	$1,423,009	$1,441,859	$1,480,667	$1,673,[illegible]

†Lock bar pipe.
‡Lock part or riveted pipe.

*SEWERS AND SEPTIC TANKS.—Mount Sterling, Ky.—Bids were received by the City Clk., March 12, for furnishing all materials and laying complete about 9½ miles of sewers, varying in size from 6 to 24-in. in diameter, together with all manholes, lampholes, flush tanks, etc.; also reinforced-concrete septic tanks. Chas. E. Collins is Engr., 321 Drexel Bldg., Philadelphia, Pa. The bidders were (A) John B. McClain & Co., Newport, Ky.; (B) Fernow & Brown, Montclair, N. J.; (C) H. S. Bosler, Chattanooga, Tenn.; (D) Scott & Walker, Cincinnati, Ohio; (E) H. K. Bell, Lexington, Ky.; (F) T. S. Scanlon, Huntington, W. Va.; (G) E. C. McConnel, Kenton, Ohio; (H) C. E. Harris, Covington, Ky.; (I) C. C. Miller & Co., Covington, Ky.; (J) A. J. Waldrys, Knoxville, Tenn.; (K) Noll Construction Co., Chattanooga, Tenn.; (L) L. W. Hancock & Co., Louisville, Ky.; (M) Kelley Bros., Portsmouth, Ohio; (N) James Ferry & Sons, Pittsburg Pa.; (O) Clark County Construction Co. Winchester, Ky.; (P) Paul & Kershner, Dayton, Ohio; (Q) Louis Cognets & Co., Lexington, Ky.

The itemized bids were as follows:

	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.	O.	P.	Q.
34,065 lin. ft. trench less than 6 ft. deep	$0.24	$0.27	$0.19	$0.32	$0.21	$0.27	$0.29	$0.28	$0.35	$0.32	$0.26	$0.60	$0.23	$0.29	$0.29	$0.25	....
11,220 lin. ft. trench 6 to 8 ft. deep	.33	.50	.30	.41	.32	.35	.36	.32	.45	.35	.30	.75	.35	.42	.31	.40	....
3,150 lin. ft. trench 8 to 10 ft. deep	.40	.65	.62	.62	.43	.45	.40	.45	.70	.50	.40	1.00	.57	.57	.35	.50	....
8,800 lin. ft. trench 10 to 12 ft. deep	.48	.83	.67	.80	.56	.57	.60	.55	1.15	.80	.55	1.25	.90	.74	.39	.80	....
300 lin. ft. trench 12 to 14 ft. deep	.80	1.00	1.12	1.05	.75	.72	.70	.90	1.40	1.10	.65	2.00	1.07	.88	.42	1.50	....
150 lin. ft. trench 14 to 16 ft. deep	1.00	1.25	1.90	1.40	1.00	.93	1.00	1.20	2.00	1.50	.95	3.00	1.52	1.15	.46	3.00	....
29,870 lin. ft. 6-in. sewer pipe	.13	.15½	.18	.13	.16	.13	.10	.10	.09½	.15	.13	.25	.19	.12	.12	.12	....
8,554 lin. ft. 8-in. sewer pipe	.21½	.22½	.27	.20	.24	.19½	.18	.15	.14	.22	.21	.31	.28	.22	.19	.18	....
2,280 lin. ft. 10-in. sewer pipe	.30	.33	.36	.32	.35	.30½	.27	.22	.23	.30	.30	.42	.34	.31	.27	.30	....
3,385 lin. ft. 12-in. sewer pipe	.49	.43	.48	.42	.49	.40	.32	.30	.28	.40	.40	.52	.48	.41	.36	.40	....
1,818 lin. ft. 18-in. sewer pipe	.80	.74	.82	.75	.88	.70	.60	.55	.54	.80	.72	1.00	.81	.74	.75	.70	....
3,556 lin. ft. 20-in. sewer pipe	1.05	.97	1.10	1.00	1.11	.91	.80	.75	.80	1.00	.90	1.23	1.02	1.00	1.02	1.00	....
500 lin. ft. 4-in. vertical pipe	.12	.18	.20	.08	.16	.07	.07	.10	.06	.12	.08	.18	.17	.35	.08	.10	....
2,000 cu. yds. rock excavation	3.35	2.50	3.00	3.00	4.00	4.25	4.00	3.00	2.75	4.50	3.50	5.00	3.75	3.90	3.00	3.50	....
136 manholes	40.00	42.50	43.00	30.00	36.00	33.00	35.00	40.00	40.00	40.00	40.00	50.00	36.00	37.00	52.83	25.00	....
5 lampholes	20.00	7.00	7.50	7.50	8.00	6.00	12.00	20.00	16.00	10.00	25.00	15.00	9.00	8.00	8.87	10.00	....
3 flush tanks	75.00	65.00	75.00	75.00	70.00	60.00	75.00	100.00	70.00	100.00	75.00	65.00	78.00	80.00	68.48	60.00	....
15 tons cast-iron pipe	60.00	42.00	45.00	40.00	45.00	35.00	45.00	40.00	40.00	50.00	50.00	40.00	38.00	75.00	30.00	40.00	....
10 cu. yds. concrete	6.50	6.00	10.00	10.00	8.00	9.00	7.00	8.00	10.00	12.00	10.00	12.00	6.25	9.00	7.00	10.00	....
2,000 lin. ft. lumber left in trench	20.00	30.00	25.00	25.00	30.00	20.00	30.00	30.00	25.00	25.00	30.00	30.00	32.50	20.00	15.00	20.00	....
Totals for sewer system	$40,695	$43,413	$41,517	$42,416	$40,511	$41,350	$40,064	$37,520	$42,160	$46,778	$40,227	$71,022	$43,853	$44,419	$41,025	$39,520	.....
800 cu. yds. earth excavation	$0.40	$0.50	$0.70	$0.50	$0.60	$0.60	$0.40	$0.60	$0.50	$0.50	$0.25	$1.00	$0.45	$0.45	$0.50	$0.50	$0.60
500 cu. yds. rock excavation	3.00	2.50	2.75	1.50	2.00	2.50	3.75	2.00	1.25	3.00	2.50	4.50	3.10	2.50	2.00	3.00	4.50
4½ tons reinforcing steel bars	100.00	45.00	75.00	75.00	60.00	42.00	45.00	43.00	41.60	60.00	75.00	112.00	40.50	100.00	160.00	80.00	43.00
180 cu. yds. concrete in walls and floors	8.80	10.00	10.00	8.00	11.00	9.00	8.50	12.30	11.50	12.00	8.00	12.00	11.25	7.00	8.00	10.00	12.30
70 cu. yds. concrete in roof	9.00	12.00	15.50	11.00	12.00	9.00	9.50	12.30	11.50	15.00	10.00	15.00	12.00	9.00	10.00	12.00	12.30
3 sluice valves, 8-in	23.00	30.00	30.00	35.00	18.00	18.00	16.50	18.00	16.00	25.00	26.50	10.50	27.75	20.00	16.50	25.00	18.00
1 sluice valve, 10-in	31.00	35.00	40.00	40.00	30.00	25.00	24.00	25.00	20.00	30.00	34.00	12.50	35.00	22.00	22.00	30.00	25.00
3 sluice valves, 12-in	40.00	40.00	45.00	60.00	40.00	35.00	37.50	34.00	29.00	35.00	45.83⅓	15.00	45.15	30.00	28.40	40.00	34.00
2 sluice valves, 18-in	55.00	60.00	65.00	125.00	100.00	65.00	102.00	60.00	54.00	40.00	120.00	26.00	81.00	60.00	39.60	70.00	60.00
Pipes, manhole covers, etc. (lump sum)	453.00	250.00	322.00	100.00	132.00	125.00	200.00	300.00	530.00	300.00	100.00	100.00	250.00	500.00	195.00	200.00	300.00
Totals for septic tanks	$5,267	$5,107	$5,875	$4,372	$5,299	$4,608	$5,182	$5,349	$4,604	$5,970	$4,518	$7,005	$5,622	$4,742	$4,130	$5,465	$6,599

*SEWERS AND DISPOSAL WORKS.—Monticello, N. Y.—Bids were received by the Sewer Commissioners March 17 for construction of a portion of a system of sewers and a sewage disposal plant. The bidders were, (A) Charles Ippolito, Newark, N. J.; (B) Albert Gaffey, Syracuse, N. Y.; (C) Delaware Construction Co., Sidney, N. Y.; (D) Joseph B. O'Rourke & Co., Boston, Mass.; (E) Kellum & Shaffer Co., Schenectady, N. Y.; (F) Albert M. Banker, Gloversville, N. Y.; (G) John W. Heller, Newark, N. J.; (H) C. S. LAMBIE CO., Pittsburg, Pa., (awarded contract); (I) Rider Construction Co., Monticello, N. Y.; (J) L. F. Bannow Co., Kingston, N. Y. The itemized bids were as follows:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
4,415 lin. ft. excavating and backfilling, under 6 ft.	$0.25	$0.40	$0.25	$0.30	$0.25	$0.60	$0.30	$0.30	$0.25	$0.30
8,368 lin ft. excavating and backfilling, 6 to 8 ft.	.29	.60	.30	.38	.40	.70	.46	.45	.36	.33
14,870 lin ft. excavating and backfilling, 8 to 10 ft.	.38	.70	.60	.50	.50	.75	.50	.55	.48	.39
8,304 lin. ft. excavating and backfilling, 10 to 12 ft.	.62	1.10	.80	.75	.70	.90	.50	.65	.60	.53
5,392 lin. ft. excavating and backfilling, 12 to 14 ft.	.78	1.40	1.25	1.05	.90	1.10	.65	.78	.80	.75
3,417 lin. ft. excavating and backfilling, 14 to 16 ft.	1.07	2.00	2.00	1.45	1.15	1.50	.90	.90	1.00	1.00
1,026 lin. ft. excavating and backfilling, 16 to 18 ft.	1.55	3.00	3.00	2.00	2.00	2.00	1.20	1.20	1.20	1.15
175 lin. ft. excavating and backfilling, over 18 ft.	2.25	4.00	4.00	3.00	4.00	3.00	1.50	1.80	1.50	1.40
24,053 lin. ft. tile pipe, 8-in., furnishing and laying.	.26	.20	.27	.17	.15	.18	.20	.20	.20	.19
5,492 lin. ft. tile pipe, 10-in., furnishing and laying	.32	.30	.36	.23	.25	.28	.25	.27	.30	.26
5,625 lin. ft. tile pipe, 12-in., furnishing and laying	.42	.35	.43	.30	.30	.35	.35	.36	.50	.33
3,506 lin. ft. tile pipe, 15-in., furnishing and laying	.56	.52	.63	.50	.55	.53	.50	.62	.70	.48
190 lin ft. tile pipe, 18-in., furnishing and laying	.75	.70	.81	.65	.70	.66	.70	.81	.90	.60
4,260 lin. ft. tile pipe, 20-in., furnishing and laying	.98	.95	1.00	1.25	1.00	.86	.95	1.10	1.20	.76
450 lin. ft. tile pipe, 24-in., furnishing and laying	1.10	1.25	1.40	1.30	1.20	1.20	1.30	1.50	1.80	1.16
100 lin. ft. 4 × 2-ft. concrete sewer	3.50	4.00	7.00	6.00	6.00	4.00	5.00	3.50	4.00	.80
853 branches or specials on 8-in. pipe	.67	.45	.50	.30	.60	.32	.50	.63	1.00	.82
260 branches or specials on 10-in. pipe	1.02	.60	.67	.47	.95	.48	.85	.81	1.50	1.26
188 branches or specials on 12-in. pipe	1.35	.75	.83	.61	1.25	.63	1.25	.96	2.00	1.36
86 branches or specials on 15-in. pipe	1.83	1.20	1.30	1.10	1.90	.97	1.70	1.71	3.00	1.06
6 branches or specials on 18-in. pipe	2.30	1.50	1.60	1.40	2.50	1.25	2.50	2.10	4.00	2.36
94 branches or specials on 20-in. pipe	3.05	2.05	2.15	1.80	3.35	1.72	4.70	2.90	5.00	3.26
6 branches or specials on 24-in. pipe	4.75	3.00	3.00	2.75	6.00	2.20	6.50	5.00	6.00	3.51
73 manholes, less than 10 ft. deep	40.00	50.00	50.00	48.00	45.00	52.00	50.00	40.00	40.00	30.00
20 manholes, 10 to 12 ft. deep	45.00	60.00	55.00	55.00	65.00	53.00	60.00	45.50	50.00	35.00
27 manholes, 12 to 14 ft. deep	58.00	65.00	65.00	73.00	75.00	55.00	70.00	60.00	56.00	40.00
8 manholes, 14 to 16 ft deep	65.00	75.00	75.00	85.00	80.00	58.00	85.00	70.00	62.00	50.00
5 manholes, 16 to 18 ft deep	75.00	85.00	80.00	95.00	85.00	65.00	100.00	85.00	68.00	60.00
1 manhole, 18 to 20 ft. deep	70.00	100.00	90.00	125.00	95.00	75.00	150.00	100.00	74.00	65.00
26 flush tank syphons, 5-in	35.00	100.00	25.00	30.00	100.00	75.00	40.00	47.00	35.00	25.00
60 M. ft. lumber	30.00	35.00	30.00	27.00	50.00	30.00	40.00	40.00	35.00	40.00
450 cu. yds. concrete, 1—3—5	6.50	8.00	9.00	12.00	9.50	12.00	8.00	8.00	6.50	8.00
390 cu. yds. concrete, 1—3—7	7.00	6.00	8.00	6.50	6.50	6.00	7.00	6.25	6.00	7.00
130 cu. yds. concrete, 1—2—3	8.00	8.00	10.00	12.00	10.00	8.00	8.50	8.50	7.00	10.00
2,550 cu. yds. excavating and filling	.35	.40	.40	.35	.50	.40	.50	.60	.20	.50
5,050 cu. yds. borrowing and filling	.35	.60	.50	.35	.65	.40	.50	.50	.80	.50
150 cu. yds. dry rubble masonry	2.00	2.50	3.50	2.50	6.50	4.00	6.50	6.00	5.00	2.00
6,000 cu. yds. rock excavation in trench	3.50	3.00	3.00	3.50	4.00	2.00	2.50	2.00	2.50	3.50
500 cu. yds. rock excavation at disposal plant	1.00	2.00	1.50	3.00	2.00	1.50	2.50	1.00	2.00	3.50
2,000 cu. yds. excav. and grading at disposal plant.	.60	.40	.35	.30	.50	.50	.60	.55	.25	.30
18,500 lin. ft. 6-in. horse shoe tile pipe	.08	.06½	.06	.10	.08	.08	.07	.07	.07	.06
400 lin. ft. 5-in. round tile pipe	.08	.06	.06	.10	.08	.07	.07	.28	.07	.06
4,600 lin. ft. 3-in. round tile pipe	.06	.04	.03	.08	.05	.05	.05	.12	.05	.06
50 lin. ft. concrete conduit, 4.5 × 9 ft.	1.30	1.00	3.00	4.00	2.00	.90	2.00	1.50	1.00	1.75
210 lin. ft. concrete conduit, 2 × 6 ft.	.75	.50	1.00	2.00	1.25	.60	1.50	1.00	.35	.90
350 lin. ft. concrete conduit, 3 × 6 ft.	.90	.75	1.50	3.00	1.50	.70	1.60	1.20	.50	1.25
1,900 cu. yds. gravel for contact beds	1.25	1.50	1.50	1.00	1.75	1.40	2.50	1.65	1.00	1.50
800 rods relocation of stream	3.50	2.50	1.00	3.00	.85	.33	4.00	1.00	2.00	1.50
Totals	$100,320	$116,771	$116,000	$112,112	$122,600	$114,000	$98,712	$92,900	$96,000	$116,092

PAVING.—Mankato, Minn.—Bids were received March 14 for brick paving. J. R. Thompson is Pres. Board of Public Works. The bidders were: (A) J. W. Turner Improvement Co., Des Moines, Iowa; (B) North Star Construction Co., Mankato, Minn.; (C) T. R. Coughlan Co., Mankato, Minn.; (D) FIELDING & SHEPLEY, St. Paul, Minn. (awarded contract). The unit prices for plain brick paving on a 6-in. concrete base were: (A) $2.05; (B) $2.28; (C) $1.87; (D) $1.89. For paving between the street railroad tracks: (A) $2.80; (B) $2.62; (C) $2.29; (D) $2.30. The totals were: (A) $42,586; (B) $46,998; (C) $38.651; (D) $39,054.

WATER MAINS.—New York, N. Y.—The Dept. of Water Supply, Gas and Electricity opened bids March 2, for the construction of mains in Classon Point Road and in Burke St. The contract was awarded to WILTON CONSTRUCTION CO., at a price of $24,801. The items are as follows: 500 tons c.-i. pipe, $27; 10 tons specials, $57; 11 tons valve boxes, $46; 11,200 lin. ft. 12-in. pipe, 68 cts.; 13 screws, 12-in., $48; 28 screws, 6-in., $16; 28 double nozzle hydrants, $36; 2 20 × 12-in. connections, $125. A number of items were bid at nominal prices.

The contract for laying mains in Barnes, Bloudell and Carpenter Sts. was also awarded to the WILTON CONSTRUCTION CO., at $32,616. The principal items were as follows: 460 tons c.-i. pipe, $27; 34 tons branches, $57; 48 tons valve boxes, $46; 4,640 lin. ft. 12-in. pipe, 57 cts.; 14,480 lin. ft. 6-in. pipe, 46 cts.; 18 valves, 12-in., $54; 120 valves, 6-in., $16.35; 72 double nozzle hydrants, $36.40; one 20 × 6-in. connection, $75; two 16 × 6-in. connection, $75. The bids on a number of items were made at nominal figures.

The contracts for mains in the Grand Boulevard or Concourse and 181st St. was awarded to HANOVER CONTRACTING CO., 215 W. 125th St., New York City, at $279,553. The items were as follows: 4,650 tons c.-i. pipe, $25.50; 180 tons branches, $57; 142 tons valve boxes, $44; 18,500 cu. yds. rock excavation, 50 cts.; 100 cu. yds. masonry excavation, 50 cts.; 60,000 cu. yds. earth excavation, 50 cts.; 65,000 cu. yds. earth filling, 50 cts.; 23,000 lin. ft. 20-in. pipe, 60 cts.; 48,500 lin. ft. 12-in. pipe, 35 cts.; 17 valves, 20-in., $130; 140 valves, 12-in., $40; 257 valves, 6-in., $20; 240 double nozzle hydrants, $47; 18 valves, 20-in., $25; one 36 × 20-in. connection, $400; one 36 × 12-in. connection, $225; one 20 × 20-in. connection, $300. Several other items were so much at variance with the real cost that any figures would be confusing.

*DRAW BRIDGE.—Snohomish, Wash.—Bids were received by the Board of County Commissioners of Snohomish County on Feb. 28, for the construction of a steel draw span and trestles over the Snohomish River. John F. Birney is County Engr., Everett, Wash. Two sets of plans were bid on, one (Plan A) providing for a railroad crossing at grade and the other (Plan B), at an elevation 5.25 ft. higher providing an undercrossing for the railroad. The pile approach called for 76 M. ft. of lumber; 2,400 lin. ft. piling; 13 tons of steel; 202 cu. yds. concrete foundations; [illegible] M. ft. creosoted lumber and blocks. The estimate for the draw span included 45 M. ft. of creosoted plank and blocks. In the steel span and draw rest (Plan B) the following quantities were included: 187 tons structural steel; 1,506 cu. yds. concrete in center pier; 756 cu. yds. concrete in end piers; 4,800 lin. ft. (160 piles) piling in piers; 83 M. ft. lumber; 7,800 lin. ft. piling in draw rest. In all cases the roadways were 20 ft. wide and the two sidewalks were included, each 6 ft. wide. The bidders were: (A) Everett Construction Co., Everett, Wash.; (B) Minneapolis Steel & Machinery Co., Minneapolis, Minn.; (C) International Contracting Co., Seattle, Wash.; (D) Pearson Construction Co., Inc., Seattle, Wash.; (E) Cowlitz Bridge Co.; (F) Lance & Peters, Seattle, Wash.; (G) American Pile Driving Co., Everett, Wash.; (H) Puget Sound Bridge & Dredging Co., Seattle, Wash. The items were as follows:

	(A.)	(B.)	(C.)	(D.)	(E.)	(F.)	(G.)	(H.)
PLAN A.								
280-ft. steel draw span, including center and end piers	$58,568	$52,161	$50,416	$56,461	$57,695	$73,796	$44,147	$59,500
171-ft. pile trestle	1,195	1,043	1,053	2,009	1,200	1,368	1,086	1,265
52-ft. steel trestle	3,594	2,525	5,515	3,480	3,645	4,056	2,571	4,160
Totals	$63,357	$55,729	$56,984	$61,951	$62,561	$79,220	$47,803	$64,925
PLAN B.								
280-ft. steel draw span, including center and end piers	$60,288	$53,648	$51,750	$58,985	$58,902	$77,397	$45,568	$61,500
304-ft. pile trestle	2,242	1,976	1,839	3,642	2,213	2,538	2,006	2,310
71-ft. steel trestle	5,157	3,557	4,271	6,771	5,668	6,603	4,350	7,916
Totals	$67,689	$59,217	$58,861	$69,397	$66,783	$86,538	$51,924	$71,727

WATER-WORKS, PAVING.—Burlington, Wis.—Bids were received on March 15 by P. J. Hurtgen, City Engr., for the following work: For the extension of the water-works system; the work includes 1,334 lin. ft. of 4-in. water pipe; four 4-in. gates and valve boxes; one 6-in. gate and valve box; one hydrant; two hydrants reset; 2,500 lin. ft. of cement curb, etc.

The contract was awarded to H. HOHENSEE at $935. The unit prices were as follows: 1,334 lin. ft. 4-in. pipe, 60 cts.; 4 gate valves, 4-in. and boxes, $16; one gate valve, 6-in., and box, $20; one hydrant, furnished and set, $40; two hydrants, reset, $12. The bidders for paving work were, (A) CHRIS PETERSEN (awarded contract); (B) James Cape & Sons; (C) Kamschulte-Pickhard Engineering & Construction Co.; (D) F. N. Richert; (E) E. Wolley; (F) Bacheller & Powell; (G) Eub-Cochems & Nebel; (H) A. Thompson; (I) O. Farrell Construction Co. The itemized bids were as follows: 10,321 sq. yds. brick paving on 6-in. concrete base, (A) $1.57, (B) $1.66, (C) $1.66, (D) $1.67, (E) $1.71¼, (F) $1.72, (G) $1.76, (H) $1.78, (I) $2.15; 2,500 lin. ft. cement curb, (A) 28 cts., (B) 33 cts., (C) 33½ cts., (D) 33 cts., (E) 29 cts., (F) 31 cts., (G) 32 cts., (H) 40 cts., (I) 54 cts. The totals, (A) $16,904, (B) $17,958, (C) $17,978, (D) $18,061, (E) $18,399, (F) $18,527, (G) $18,965, (H) $19,371, (I) $23,540.

LIST OF CONTRACTS PENDING.

Light, Heat and Power Plants.

		Noted in issue of
3-28	Franchise, Los Angeles, Cal.	3- 3
4- 1	Gas franchise, Ft. William, Ont.	3-17
4- 2	Heating, etc., Portland, Me.	3-17
4- 5	Wiring, etc., Fort Dade, Fla.	3-10
4- 6	Franchise, Hayward, Cal.	3- 3
4- 7	Power plant, Albany, N. Y.	3-17
4-12	Power plant, Otisville, N. Y.	3-24
4-13*	Light system, Ft. Sill, Okla.	3-17
4-14*	Power station, Rumford, Me.	3-17
4-15	Elec. plants, Camrose, Alta.	3-10

Bridges.

3-25	Bridge, Grandville, Mich.	3-24
3-25	Bridge, Coshocton, Ohio	3-24
3-26	Bridge, Guelph, Ont.	3-24
3-26	Bridge, Meeker, Colo.	3-24
3-26	Bridge, Dawson, Ohio	3-17
3-28	Bridges, Hartford City, Ind.	3-10
3-28	Bridge, Muskogee, Okla.	3-24
3-28	Bridges, Grand Island, Neb.	3-24
3-28	Arch, Fairbury, Neb.	3-24
3-28	Bridge, Lisbon, Ohio	3-24
3-28	Bridge, West Chester, Pa.	3-24
3-29	Bridges, Muskogee, Okla.	3-10
3-29*	Bridge, Kempton, Pa.	3-10
3-30	Bridge, Minitonas, Man.	3-24
3-31*	Bridges, Minneapolis, Minn.	3-10
4- 1	Bridge, Rutherford, N. J.	3-24
4- 2	Bridges, etc., Brantford, Ont.	3-24
4- 4	Bridge, Brantford, Ont.	3-24
4- 4	Substructures, etc., Bryan, Ohio.	3-24
4- 4	Bridge, Streator, Ill.	3-10
4- 4	Bridge, Laporte, Ind	3- 3
4- 4	Bridge, Talladega, Ala.	3-17
4- 4	Bridge repair, Harrisonburg, La	3-17
4- 5	Bridge, San Jose, Cal.	3- 3
4- 5	Bridge, Castlerock, Wash.	2-24
4- 5	Bridges, Goshen, Ind.	3-24
4- 5	Bridges, Vincennes, Ind.	3-24
4- 5	Bridges, Waynesburg, Pa.	3-24
4-15	Bridge repairs, Reading, Pa.	3-24
6- 1	Bridge, Gretna, La.	3-24
6- 1	Substructure, Whiterocks, Utah.	3-10

Buildings.

3-25	Post-office, Lexington, Ky.	2-17
3-25	Light-house, etc., San Francisco, Cal.	3-10
3-25	Storehouse, Ft. Barrancas, Fla.	3-10
3-26	Church, Kelowna, B. C.	3-10
3-26	Post-office, Rochester, N. Y.	3-10
3-28*	Post-office, Quincy, Ill.	2-17
3-28	School, Cincinnati, Ohio	3-10
3-29	Post-office, Estherville, Ia.	2-17
3-30*	Court-house, Butte, Mont.	2- 3
3-30	Post-office, Peru, Ind.	3- 3
3-30	Bldg. repairs, Pittsburg, Pa.	3-24
3-31	Post-office, Brainerd, Minn.	3- 3
3-31	Quarter, Ft. Sam Houston, Tex.	3-10
4- 1	Buildings, Ft. Mason, Cal.	3- 3
4- 1	Post-office, Hattiesburg, Miss.	3- 3
4- 2	Buildings, Ft. Williams, Me.	3-17
4- 4	Jail, Inverness, Fla.	3-24
4- 4	School, New York	3-24
4- 5	Guardhouse, Ft. Dade, Fla.	3-17
4- 6	Quarters, Ft. Niagara, N. Y.	3-17
4- 5	Post-office, Independence, Mo.	3- 3
4- 6	Ice plant, North Chicago, Ill. (Mfg. Pl.)	3-17
4- 8	Hospital, Columbus, Ohio	3-17
4-10*	Quarters, etc., Fort Strong, Mass.	3-24
4-11	Post-office, Ashtabula, Ohio	3-10
4-13*	Laundry, Ft. D. A. Russell, Wyo.	3-24
4-14*	Schools, Bayonne, N. J.	3-24
4-14	Post-office, Columbus, Neb.	3-17
4-15	Cottage, La Fayette, Ind.	3-24
4-19	Post-office, Concord, N. C.	3-24
4-20*	Post-office, Greencastle, Ind.	3-24
4-25	Post-office, Kansas City, Kan.	3-24
4-26*	Post-office, Rochester, Minn.	3-24
4-27*	Post-office, Enid, Okla.	3-17
5- 2	Post-office, Lander, Wyo.	3-24
5- 7	Storehouse, Bremerton, Wash.	3-24
5- 7	Quarters, Bremerton, Wash.	3-24
7- 1	Plans, New Orleans, La.	3-17

Water-Works.

3-25	Reservoir, Center, Colo.	3-17
3-25*	Main, Lebanon, Pa.	3- 3
3-25	Water-works, Wakefield, Kan.	3-24
3-25	Cocks, Minneapolis, Minn.	3-24
3-26	Water pipe, Alliance, Ohio	3-24
3-28	Water pipe, Los Angeles, Cal.	3-24
3-28	Water-works bonds, Sapulpa, Okla	3-24
3-28	Pump-house, Summit, Ill.	3-24
3-28	Valves, Youngstown, Ohio	3-24
3-28	Water system, Cincinnati, Ohio.	3-17
3-29*	Pumping plant, Burlington, Iowa	3-17
3-29	Water main, Black River Falls, Minn	3-24
3-30*	Water-works, Fort Erie, Ont.	3-24
3-30	Boiler, Savannah, Ga.	3-24
4- 1	Irrigation work, Calgary, Alta.	3-24
4- 1	Sleeves and valves, Portland, Ore	3-24
4- 1*	Water-works, Miles, Tex.	3-10
4- 4	Water pipe, Winnipeg, Man.	3-10
4- 4	Water-works, Sherman, Tex.	3-24
4- 5*	Irrigation work, Canon City, Colo.	3-24
4- 5	Water mains, Madison, Wis.	3-17
4- 5	*W.-wks. conduit, Meridian, Miss.	3-17
4- 6*	Pumping plant, Fort Hancock, N. J.	3-10
4-11*	W.-Wks. bonds, Ramona, Okla.	3-10
4-12	Water mains, Fort Bayard, N. Mex	3-24
4-14	Reservoir, Fort Collins, Colo.	3-24
4-14	Water-works supplies, Aberdeen, S. Dak.	3-10
4-15	Water-works, Opelika, Ala.	3-24
4-15	Water mains, Florence, S. C.	3-24
4-18	Pump house, Weston, Ont.	3-24
4-19	Laying pipe, etc., North Battleford, Sask	3-24
4-20	Pipe, Marietta, Pa.	3-24
5- 1	Irrigation work, Calgary, Alta.	3-24

Sewers.

3-26	Sewer, Newburg, Ohio	3-17
3-26	Sewers, Elkhart, Ind.	3-24
3-26	Sewers, Harrisburg, Pa.	3-24
3-28	Sewers, Muskogee, Okla.	3-24
3-28	Sewage works, Oklahoma City, Okla	3-24
3-28*	Sewers, Wash., D. C.	3-17
3-29*	Sewer system, South Amboy, N. J.	3-17
3-29	Sewer, Michigan City, Ind.	3-24
3-29	Sewer, Juniata, Pa.	3-24
3-30	Sewers, Beloit, Wis.	3-24
3-30	Castings, Aurora, Ill.	3-24
3-30	Supplies, Brooklyn, N. Y.	3-24
3-29	Sewers, New York	3-17
3-31*	Sewer pipe, Brantford, Ont.	3-17
4- 1	Sewer system, Cleveland, Tenn.	2-17
4- 1	Sewer, Louisville, Ky.	3-24
4- 4	Sewer, Toronto, Ont.	3-24
4- 4	Culvert, Ashley, N. Dak.	2-10
4- 5*	Sewer system, Comstock, N. Y.	3-17
4- 5	Sewers, Peabody, Kan.	3-24
4- 6	Sewer, Arnold, Pa.	3-24
4- 6	Sewers, Brooklyn, N. Y.	3-24
4- 8	Sewer, Louisville, Ky.	3-24
4-14	Sewer extension, Canton, Ill.	3-17
4-15	Sewer work, Big Stone Gap, Va.	3-17
4-19*	Sewer, Toronto, Ont.	3-17
4-28	Sewer, Fargo, N. Dak.	3-24
5- 1	Sewers, Danville, Ill.	3-24
5- 3	Sewer system, Manhattan, Kan.	3-17

Streets and Roads.

3-24	Road rollers, New York	3-24
3-25	Paving, etc., Troy, N. Y.	3-24
3-25	Sidewalks, Oakley, Ohio	3-17
3-25	Road roller, Minneapolis, Minn.	3-17
3-25	Road, Cincinnati, Ohio	3- 3
3-26	Pavement, Normal, Ill.	3-17
3-26	Paving, Little Rock, Ark.	3-24
3-28	Paving, Steubenville, Ohio	3-24
3-28	Road impvt., Los Angeles, Cal.	3-24
3-28	Macadam, Youngstown, Ohio	3-24
3-28	Roads, Hartford, Conn.	3-24
3-28*	Sidewalk, Lake Charles, La.	3-17
3-29	Paving, Sioux Falls, S. Dak.	3-17
3-29	Paving, Goshen, Ind.	3-24
3-29	Paving, Stratford, Ont.	3-24
3-30	Paving, etc., New York	3-24
3-30	Road, Cleveland, Ohio	3-17
3-30	Paving, Raleigh, N. C.	2-10
3-30	Road, Cleveland, Ohio	3-10
3-30	Macadam, Columbus, Ohio	3-10
3-31	Driveway, Minneapolis, Minn.	3-17
4- 1	Paving, Gallitzin, Pa.	3-17
4- 1	Roads, Cincinnati, Ohio	3-10
4- 1	Paving, Salt Lake City, Utah	3-24
4- 4	Paving, Atlanta, Ga.	3-24
4- 4*	Roads, walks, Ft. Du Pont, Del.	3-10
4- 4	Road, etc., Ft. Strong, Mass.	3-17
4- 4	Roads, Harrisonburg, La.	3-17
4- 4	Macadam, Rushville, Ind.	3-17
4- 4	Stone road, Tipton, Ind.	3-17
4- 4	Paving, Muncie, Ind.	3-17
4- 4*	Roads, Albany, N. Y.	3-17
4- 5	Gravel road, Rockville, Ind.	3-17
4- 5	Paving, Amsterdam, N. Y.	3-24
4- 5	Road oiling, Cleveland Heights, Ohio	3-24
4- 5	Road, Petersburg, Ind.	3-24
4- 5	Gravel road, Covington, Ind.	3-24
4- 5	Paving, Eveleth, Minn.	3-24
4- 6	Walks, etc., Ft. Leavenworth, Kan	3-24
4- 6	Sidewalks, etc., Aberdeen, Wash.	3-24
4- 6	Highway, Globe, Ariz.	3-24
4- 6*	Roads, Albany, N. Y.	3-17
4- 6	Road, Cleveland, Ohio	3-17
4- 7*	Walks, Bozeman, Mont.	3-17
4- 8*	Roads, Albany, N. Y.	3-17
4- 8	Road, Cincinnati, Ohio	3-24
4- 8	Gravel road, Muncie, Ind.	3-24
4- 8	Gravel road, Williamsport, Ind.	3-24
4- 8	Macadam, Two Rivers, Wis.	3-24
4-11	Gravel road, Bedford, Ind.	3-24
4-11	Paving, Aberdeen, S. Dak.	3-24
4-11	Pavement, Moose Jaw, Sask.	3-24
4-12	Macadam, St. Paul, Minn.	3- 3
4-14	Sidewalks, Connersville, Ind.	3-24
4-14	Paving, Platteville, Wis.	3-24
4-15	Gravel road, Kokomo, Ind.	3-24

Miscellaneous.

3-24	Levee, Logan, Ohio	3-24
3-25*	Comfort stations, Niagara Falls, N. Y.	3-17
3-25	Safes, Wash., D. C.	3-17
3-25	Garbage removal (Garbage), Jersey City, N. J.	3-24
3-25	Street sprinkling (Garbage), Indianapolis, Ind.	3-24
3-26	Canals, Edenton, N. C.	3-17
3-26	Ditches, Bluffton, Ind.	3- 3
3-26	Ditch, Piggott, Ark.	3-24
3-28*	Dredging equipment, Phila., Pa.	3-17
3-29*	Dredging, New York	3- 3
3- 29	Barge Canal, Albany, N. Y.	2-24
3-30	Snagboat, Wheeling, W. Va.	3- 3
3-30	Dredging, Toronto, Ont.	3-17
3-30*	Crematory (Garbage), Fort Sheridan, Ill.	3-10
3-31	Road oil, New York	3-17
4- 1*	Dredging, New York	3- 3
4- 1	Torpedo boats, Wash., D. C.	2- 3
4- 1	Torpedo boats, Wash., D. C.	3-24
4- 2	Dredging, Boston, Mass.	3-24
4- 4	Drains, Eldora, Iowa	3-24
4- 4	Culverts, Ashley, N. Dak.	2-10
4- 4	Cement, Atlanta, Ga.	3-17
4- 5	Drains, Mitchell, S. Dak.	3-24
4- 7*	Barge canal, Albany, N. Y.	3-17
4- 7	Ash-hoist, Baltimore, Md.	3-10
4- 9	Levee, etc., Cameron, Tex.	3-24
4-11*	Dredging, St. Paul, Minn.	3-24
4-12	Shop equipment, etc., See Transcontinental Ry. (Rys.)	3-17
4-14*	Timber, Detroit, Mich.	3-17
4-15	See Algoma Central & Hudson Bay Ry.	3- 3
4-15	Tile, Woodstock, Ill.	3-24
4-15	Crematory (Garbage), West Point N. Y.	3-24
4-19*	Revetment, Vicksburg, Miss.	3-24
4-29*	Crematory, Atlanta, Ga.	3-24
4-21	Fire apparatus, Vancouver, B. C.	3-24
4-30	Ditch, Olivia, Minn.	12-22
5- 4	Ditch, Conde, S. Dak.	3-24
5-15	Watering carts, etc. (Garbage), Boston, Mass.	3-24

Examinations.

3-29	Mechanical and Optical Dftsman, Philadelphia, Pa.	3- 3
3-29	Clerk-Draftsman, Cheyenne, Wyo.	3- 3
3-29	Mechanical Dftsman, Wash., D. C.	3- 3
3-30	Scientific Asst., Wash., D. C.	2-10
4- 6	Scientist in Soil Survey, Wash., D. C.	3- 3
4-20	Banking economist, Wash., D. C.	3-24
4-20	Asst. chemist, Wash., D. C.	3-24
4-20	Asst. physicist, Wash., D. C.	3-24
4-20	Laboratory apprentice, Wash., D. C	3-24
4-20	Engr. in wood preservation, Wash., D. C.	3-24
5- 2	Chemist, New York	3-24
5-18	Library asst., Wash., D. C.	3-24

Plans and Specifications on File.

The following plans (Pl) and Specifications (S.) are on file (for reference only unless otherwise noted) at the office of The Engineering News Publishing Co., 220 Broadway, New York.

4- 6	Ice plant, No. Chicago, Ill. (S.)	3-17
4-11*	Dredging, St. Paul, Minn. (S.)	3-24
5- 7	Storehouse, Bremerton, Wash. (S.)	3-24
5- 7	Quarters, Bremerton, Wash. (S.)	3-24

Readers' Wants

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

CATALOGS.—Ashtabula, Ohio.—Chapin & Bryson, Archs. and Engrs., Nettleton Bldg., desire catalogs from manufacturers and dealers in their lines.

CATALOGS.—Edmonton, Can.—The Edmonton Engineering Society is open to receive catalogs, etc., from manufacturers. The society should be addressed at the Archibald Block, Edmonton, Alta, Can.

CATALOGS.—Mesa, Ariz.—We are advised by the Consolidated Canal Co. that it is contemplating considerable construction work, and desires catalogs from manufacturers of all kinds of construction equipment.

INDUSTRIAL NOTES.

GEORGE CUOZZO, general contractors, of Bangor, Me., has removed his office to 116 Exchange St., in that city.

THE ILLINOIS BRICK CO., Chicago, Ill., has recently purchased the Glenview Brick Co. and the Kemnitz Brick Co.

THE TROJAN POWDER CO. announces the removal of its California office from Oakland, Cal., to the Phelan Bldg., San Francisco.

THE FABRICATING STEEL PLANT of the Alfred E. Norton Co., Boonton, N. J., was partially destroyed by fire last December. Work has recently been started at a new mill on adjacent property.

THE RAYMOND CONCRETE PILE CO., New York and Chicago, has been awarded the contract for the concrete piles and foundation of the Marine Barracks at the League Island Navy Yard, Philadelphia.

THE AMERICAN COMPRESSOR & PUMP CO. announces the removal of the general offices of the company to 718 East Pratt St., Baltimore, Md. The New York office is in the Hudson Terminal, 30 Church St.

THE CALDWELL CONSTRUCTION CO., Columbus, Ind., has been incorporated to do a general construction business. The capital stock is $200,000. George W. Caldwell, T. V. Wilson and Herman Virgin are directors.

THE PENNSYLVANIA RAILROAD CO. is disposing of its wooden passenger equipment. This includes about 250 cars of various types. It was announced some time ago this railroad would, in the future, buy only steel equipment for its passenger service.

THE PASSENGERS TRANSPORTED in New York City in December, 1909, numbered 128,881,160, an increase of over 10,000,000 compared with the corresponding month last year. The newly opened Hudson tunnels accounted for a part of the increase, but all lines contributed.

NEW TERMINALS will be constructed at East St. Louis capable of accommodating 20,000 cars. This work, which includes a retaining wall from the Merchants Bridge to the Eads Bridge, will be done by the Terminal Railway Association at an expense of more than $1,000,000.

THE WM. CRAMP & SONS SHIP & ENGINE BUILDING CO., Philadelphia, has recently acquired control of the Federal Steel Casting Co., Chester, Pa. The capacity of this plant is approximately 1,000 tons of castings a month. The output will be largely used in the shipbuilding works.

THE BROWNING ENGINEERING CO., Cleveland, Ohio, advise us that it is frequently called upon to furnish good operators for Browning locomotive cranes. This company would like to have addresses of such men so that they may be filed for reference and supplied to those wanting operators.

A BRANCH OFFICE has been established at 84 State St., Boston, Mass., by L. J. Wing Manufacturing Co. This will be in charge of A. E. Seeling. A stock of turbine blowers will also be carried in the New England territory. An office was recently opened in the Old Colony Bldg., Chicago, in charge of J. J. Arnsfield.

TWELVE PORTABLE OIL BURNING rivet heating furnaces have recently been installed in the new plant by the Lackawanna Bridge Co., Buffalo, N. Y. This work was done by Tate, Jones & Co., Inc., Pittsburg, who make a specialty of oil burning equipment and furnaces for melting, annealing, and tempering.

THE TRENTON ENGINE CO., Trenton, N. J., has recently shipped one 300-HP. Reeves vertical cross-compound engine to the Hill Dredging Co., Atlantic City, N. J., and one engine, direct-connected to a 100-KW. Bullock generator, to be shipped to Iquitos, Peru. Also one 14 × 12-in. horizontal single cylinder engine to a Trenton, N. J., manufacturer; two small engines to New York City.

AN IMPORTANT CONSOLIDATION of tank manufacturers has just been announced. The National Wood Pipe Co. and the Pacific Tank Co., have, to expedite business and increase manufacturing and shipping facilities consolidated and in the future will be known as the Pacific Tank & Pipe Co. A new factory has just been completed in Portland, Ore., which will materially increase the output of wood tanks and continuous stave water pipe, as well as irrigation supplies. Factories and offices are now located as follows: 318 Market St., San Francisco; 404 Equitable Bldg., Los Angeles, and 210 Wells Fargo Bldg., Portland, Ore.

SIX NEW STEEL CAR FLOATS have recently been ordered by the Pennsylvania Railroad Co. Two of these, each 250 feet in length, were ordered from the New York Shipbuilding Co., and four, each 145 feet in length, from Wm. Cramp & Sons. A subsidiary company has also placed an order for one steel harbor barge.

THE GAYLEY DRY BLAST PROCESS will be installed at the works of the Oesterreichische Berg & Huettenwerks Gesellschaft, Austria. This company has two furnaces, each of 200 tons daily output. This is the first Gayley installation in Austria, though the process is in use at several works in other European countries.

AN IDEA OF THE RAPIDITY at which work can be done by molding machines is given from a recent statement by the Hanna Engineering Works, 2059 Elliston Ave., Chicago. The machine has a record of over 500 flasks, each 13 × 22 ins. in 9¼ hours. There are four castings to the flask which gives a record of 2,000 castings in a working day.

THE SULLIVAN MACHINERY CO. is installing four of its tandem Corliss compound steam and two-stage air compressors for the Mason & Hanger Co., Cornwall, N. Y., where the latter company has a contract for one of the siphons for the New York Board of Water Supply. Each of the units has a capacity of approximately 2,500 cu. ft. of free air per minute, so that the completed plant will furnish 10,000 cu. ft. of free air per minute.

NEW OFFICES have recently been established by the Kennicott Water Softener Co. at 50 Church St., New York City, and the New York Life Bldg., Kansas City, Mo. The Eastern office, in New York, will be in charge of W. T. Runcie, formerly connected with the Tatnall Engineering Co., The Kansas City office will be under the direction of O. B. R. Wilms. The main office of the company is in Corn Exchange Bank Bldg., Chicago; branches have already been established in London and Paris.

CONSIDERABLE OF THE IMPROVEMENT Work on the New York Central Lines which has been under way for several years, is nearing completion. The Michigan Central's double tube tunnel underneath the Detroit River is finished as far as the tunnel construction is concerned, but considerable of the lining and the electrical work is to be done before the tunnel will be put to actual service. This improvement has cost in the neighborhood of $10,000,000. The Lake Shore has recently obtained direct connection to the coal fields of Central Pennsylvania, which will considerably facilitate operations.

AN EXTENSIVE SCHEME for developing power plants of the Commonwealth Edison Co. of Chicago has recently been announced. President Samuel Insull of the company states that a recent purchase of approximately 110 acres has been made on the north branch of the Chicago River near Roscoe and Addison Sts. At this place, the new stations will be located and will be driven by turbine engines. Probably two stations, each containing six engines, will be built in the near future, giving an output of 160,000-KW. The expenditure for this plant will, in the course of a few years, probably aggregate between $15,000,000 and $20,000,000.

THE OHIO BLOWER CO. has just purchased a parcel of land, approximately two and one-half acres, from the Schofield Estate in Cleveland, Ohio. This property is located in the center of the manufacturing district of the East Side, being just east of 55th St. and north of the Erie Railroad Station. The company proposes to build a factory of the latest type, with every modern advantage. The company makes automobile sheet metal parts, such as hoods, fenders, tanks, underbonnets, etc., "Swartwout" cast-iron exhaust heads, steam and oil separators, ventilators, automatic safety water gauges and gauge cocks. A part of the work consists of manufacturing and installing modern dust collecting systems and supplying mechanical heating and ventilation in factories and other large buildings.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56, of Advertisements and Construction News page 118.

PRESSURE TUNNEL.

COMMONWEALTH OF MASSACHUSETTS.—Metropolitan Water and Sewerage Board. Constructing Pressure Tunnel and laying Water Mains.—Sealed proposals will be received at the office of the Metropolitan Water and Sewerage Board, 1 Ashburton Place, Boston, Mass., until 2.30 o'clock P. M. of Wednesday, April 6, 1910, for constructing a pressure tunnel about 1,900 feet in length and 6 feet 4 inches in diameter inside the concrete lining, laying about 500 feet of 80-inch steel pipe line covered with concrete on the outside and lined with mortar, and laying about 930 feet of 60-inch cast-iron pipe line for the Weston Aqueduct Supply Main in Newton, Mass. The work also includes about 950 cubic yards of top soil excavation, 910 cubic yards of top soil surfacing, 5,530 cubic yards of earth excavation and 1,700 cubic yards of rock excavation in open trench, refilling trenches and building embankments with 8,900 cubic yards of material, crushing 7,500 cubic yards of stone, 2,300 cubic yards of concrete masonry in tunnel and 500 cubic yards in open trench, 50 cubic yards of brick masonry, and 200 cubic yards of cement grout in tunnel. Plans for the work may be seen and pamphlets containing further information for bidders, forms of proposal, contract and specifications may be obtained at the office of the Chief Engineer, 1 Ashburton Place. The printed forms must be used in making proposals. The Board reserves the right to reject any or all bids or to accept the proposal deemed best for the Commonwealth. HENRY H. SPRAGUE, Chairman; HENRY P. WALCOTT, JAMES A. BAILEY, JR., Metropolitan Water and Sewerage Board. DEXTER BRACKETT, Chief Engineer of Water Works. WILLIAM N. DAVENPORT, Secretary.

Boston, March 21, 1910.

ROAD WORK.

STATE OF MARYLAND
STATE ROADS COMMISSION.
Union Trust Building, Baltimore, Md.

NOTICE TO CONTRACTORS.

Sealed proposals for building fourteen sections of State Highway, aggregating 52 miles, in the following counties of the State of Maryland, viz.:

ALLEGANY: On the National Pike between Standard Oil Warehouse and Pennsylvania Railroad Crossing, a distance of about 0.53 mile, in one section. Macadam.

On the National Pike between Six Mile House and Allegany Grove, a distance of about 1.02 miles, in one section. Macadam.

On the National Pike in Garrett County from the Garrett County line towards Piney Grove, a distance of about 2.38 miles, in one section. Macadam.

On the National Pike between Six Mile House and Flintstone, a distance of about 6.95 miles, in one section. Macadam.

ANNE ARUNDEL: On the road between Owings and Mt. Zion, from the end of the 1909 Work to Mt. Zion, a distance of about 5.19 miles, in one section. Grading, bridging and draining only.

CALVERT: On the road between Owings and Prince Frederick, from the end of the 1909 Work towards Prince Frederick, a distance of about 3.09 miles, in one section. Grading, bridging and draining.

On the road between Owings and Prince Frederick, from the end of the above section towards Prince Frederick, a distance of about 4.53 miles, in one section. Grading, bridging and draining only.

GARRETT: On the National Pike in Garrett County, from the Garrett County line towards Piney Grove, a distance of about 2.38 miles, in one section. Macadam.

On the road between Oakland and McHenry, from the end of the 1909 Work to McHenry, a distance of about 6.66 miles, in one section. Macadam.

ST. MARY'S: On the road between Mechanicsville and Leonardtown, from Hellen towards Leonardtown, a distance of about 5.20 miles, in one section. Macadam.

WASHINGTON: On the National Pike from two miles west of Conococheague Bridge towards Indian Spring, a distance of about 4.29 miles, in one section. Macadam.

On the National Pike from Clear Spring to Licking Creek, from the end of the above section, a distance of about 4.52 miles, in one section. Macadam.

WICOMICO: On the road between Mardella Springs and Sharptown, from the Riverton Road to Sharptown, a distance of about 2.61 miles, in one section.

CARROLL: On the road between Eldersburg and Gamber, a distance of about 5 miles, in one section.

will be received by the State Roads Commission, at its offices, Union Trust Building, Baltimore, Maryland, until 12 o'clock noon, on the 7th day of April, 1910, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the Book of Specifications which will be furnished by the Commission upon application and payment of $2.00 for each section. Blue-prints of each section will be furnished at the rate of 25 cents for each half-mile.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred (500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Act of the General Assembly of Maryland of 1908, Chapter 141, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission, this 24th day of March, 1910.

JOHN M. TUCKER,
Chairman.

J. C. BOWERMAN,
Secretary.

DRAINAGE SYSTEM.

ESSEX COUNTY PARK COMMISSION.
Newark, N. J.

Proposal for construction of storm water drainage system on Park Avenue in Newark, East Orange, Orange and West Orange, Essex County, New Jersey.

Sealed proposals for the above work, indorsed with the above title, will be received at the office of the Essex County Park Commission, 800 Broad Street, Newark, N. J., up to 3.30 P. M., Tuesday, April 5, 1910.

Plans and specifications can be examined at the office of the engineer, 60 Clifton Avenue, Newark, N. J.

Proposals must be submitted on the blank form furnished by the engineer and enclosed in sealed envelopes.

Proposals must contain bids for all items, and prices must be written, as well as stated in figures.

The engineer's estimate of the work to be done and by which the bids will be tested is as follows:

1,500 lin. ft. 8-inch vitrified pipe.
800 lin. ft. 10-inch vitrified pipe.
2,300 lin. ft. 12-inch vitrified pipe.
2,600 lin. ft. 15-inch vitrified pipe.
1,800 lin. ft. 18-inch vitrified pipe.
1,050 lin. ft. 20-inch vitrified pipe.
650 lin. ft. 22-inch vitrified pipe.
500 lin. ft. 24-inch vitrified pipe.
500 lin. ft. 24-inch reinforced concrete pipe, alternate bid.
400 lin. ft. 27-inch reinforced concrete pipe.
800 lin. ft. 30-inch reinforced concrete pipe.
90 reinforced concrete catch basins, 6 feet deep.
40 reinforced concrete catch basins, 7 feet deep.
150 cu. yds. brick masonry.
25,000 lbs. cast iron.
1,000 lbs. wrought iron.

The above quantities are approximate only, and the Essex County Park Commission expressly reserves the right of increasing or reducing any of the said quantities, as in its opinion becomes necessary.

A certified check for two thousand dollars ($2,000), payable to the Essex County Park Commission, without any conditions indorsed thereon, must accompany each bid, and be forfeited by the successful bidder unless he enters into a contract, should the same be awarded to him. The successful bidder will be required to furnish a bond, from a guaranty or trust company of satisfactory standing to the commission, in the sum of twelve thousand five hundred dollars ($12,500) for the faithful performance of the contract.

The Essex County Park Commission reserves the right to reject any or all bids, and retains the right to accept any bid which in its judgment is for the best interest of the county.

A. CHURCH,
Secretary Essex County Park Commission.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., March 22, 1910.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 5th day of May, 1910, and then opened, for the construction of the foundation, the basement and first floors for the extension, remodeling, etc., of the U. S. Custom House, Boston, Mass., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Architects, Messrs. Peabody and Stearns, 53 State Street, Boston, Mass., at the discretion of the Supervising Architect. Applications must be accompanied by a certified check for $200, which will be held at this office until the return of the drawings and specification. JAMES KNOX TAYLOR, Supervising Architect.

SURFACING THE MAIN PORTION OF THE CHARLES RIVER DAM.

THE COMMONWEALTH OF MASSACHUSETTS.
CHARLES RIVER BASIN COMMISSION.

Sealed proposals will be received at the office of the Charles River Basin Commission, 367 Boylston Street, Boston, Mass., until 2.30 o'clock P. M. of Monday, April 4, 1910, for surfacing and grading the main portion of the Charles River Dam. The work will require about 5,[illegible] cubic yards of earth excavation; a small amount of borrowed earth; about 5,5[illegible] linear feet of trench in which to lay pipe which will be furnished by the Commission; 13 service boxes; 2 manholes; 4[illegible] catch-basins; 2,600 cubic yards of gravel; 200 square yards of vitrified brick gutters; and 14,000 cubic yards of loam. The gravel and loam will be measured in place. The work to be done includes the laying of pipes for drains, for water and for electric wires; the construction of service boxes and catch-basins; laying brick gutters; building gravel walks; removing a portion of the shut-off dam; and placing loam on the dam and seeding it for grass. Pamphlets containing further information for bidders, forms of proposal, contract and specifications will be ready about March 26, 1910, and will be mailed to contractors who apply to the Chief Engineer, or may be obtained at his office, 367 Boylston Street, Boston, where also plans may be seen. The printed form must be used in making proposals. The Commission reserves the right to reject any or all proposals and to accept the proposal deemed best for the Commonwealth. HENRY D. YERXA, Chairman; JOSHUA B. HOLDEN, EDGAR R. CHAMPLIN, Charles River Basin Commission; HIRAM A. MILLER, Chief Engineer; WILLIAM S. YOUNGMAN, Secretary.

ELECTRIC RAILWAY.

Bids will be received until April 8th for the construction of 10 miles of Electric Railway by the Ashtabula Electric Street Railway Company. Profile, specifications, and any other necessary information can be obtained at the office of the Ashtabula Electric Street Railway Company, Haskell Building, Ashtabula, Ohio.

Situations Wanted

TECHNICAL GRADUATE (31), married, eight years' business and technical experience; hustler; desires business opening with contracting or manufacturing firm; soliciting or management of branch office; location immaterial. Address "R. B. 12," Engineering News, New York. 12-2t

Situations Open

SALESMAN—A traveling salesman experienced in selling hoisting engines, derrick irons and contractors' supplies. The principal territory to be covered the Middle West. Give experience and salary wanted. Address "O. 10," Engineering News, New York. 12-2t

PRACTICAL reinforced concrete and form man on Reservoir in Wyoming; state experience. D'OLIER ENGINEERING COMPANY, 114 Liberty Street, New York City. 12-2t

WANTED—Assistant to country engineer, vicinity of New York; must be accurate and reliable; state age, education, experience, salary expected, etc.; good computer and transit owner given preference. Address "S. B. 12," Engineering News, New York.

WANTED—Agent for New York City with connection among architects, engineers and contractors. Can secure a desirable agency for an established line of Structural and Marine Paints and other specialties. To a live man we offer an exceptionally liberal contract on a commission basis. Address "W. B. 12," Engineering News, New York. 12-1t

WANTED—A first-class Bridge Erector capable of handling Draw Bridge work. Address "P. B. 12," Engineering News, New York. 12-1t

Miscellaneous Wants

Do You Want a Representative

To handle your products in Oklahoma City and Los Angeles? Two experienced energetic Civil and Mechanical Engineers are opening offices in the above cities and are open for a few more lines of contractors' supplies and mechanical equipment. Write us. P. O. BOX 443, Chicago.